DOCUMENT RESUME

ED 066 621 AA 001 039

TITLE	Early Childhood Education: Perspectives on the Federal and Office of Education Roles.
INSTITUTION	Stanford Research Inst., Menlo Park, Calif.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/OE), Washington, D.C.
REPORT NO	EPRC-6747-17; RM-17
BUREAU NO	BR-7-1013
PUB DATE	Jul 72
CONTRACT	OEC-1-7-071013-4274
NOTE	151p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Behavior Development; Child Psychology; *Cost Effectiveness; *Day Care Programs; *Early Childhood Education; Family (Sociological Unit); *Federal Aid; Financial Support; Parent Child Relationship; Preschool Children; *Preschool Programs; Research Reviews (Publications); Working Parents
IDENTIFIERS	OCD; Office of Child Development; Office of Education

ABSTRACT

This memorandum is directed to the question of the appropriate Federal and Office of Education roles in early childhood education, specifically, what programs or approaches will meet the objectives and diverse needs of the proponents for preschool programs. In particular: (1) is there a need for some form of federally funded early childhood programs; and (2) if so, should they be "educational" in the traditional sense of the term? The issues are discussed under the following general topics: (1) Relevant Societal Conditions; (2) The Constituency; (3) The Issues; (4) The Need and Costs of Day Care; (5) The Federal Effort; (6) The Research Evidence; and (7) Recommendations and Conclusions. Statistical data are presented in tables and illustrations, and 129 references to related documents are included. (LS)

STANFORD RESEARCH INSTITUTE
Menlo Park, California 94025 · U.S.A.

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SRI Project 6747

July 1972

OE-NCERD
BR-7-1013

ED066621

Educational Policy Research Center

MAE E. ROSENBERG

Research Memorandum 17

EPRC 6747-17

EARLY CHILDHOOD EDUCATION: PERSPECTIVES ON THE FEDERAL AND OFFICE OF EDUCATION ROLES

Prepared for:

NATIONAL CENTER FOR EDUCATIONAL
RESEARCH AND DEVELOPMENT
U.S. OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CONTRACT OEC-1-7-071013-4274

AA001039

POLICY RESEARCH REPORT

A Policy Research Report is an official document of the Educational Policy Research Center. It presents results of work directed toward specific research objectives. The report is a comprehensive treatment of the objectives, scope, methodology, data, analyses, and conclusions, and presents the background, practical significance, and technical information required for a complete and full understanding of the research activity. The report is designed to be directly useful to educational policy makers.

RESEARCH MEMORANDUM

A Research Memorandum is a working paper that presents the results of work in progress. The purpose of the Research Memorandum is to invite comment on research in progress. It is a comprehensive treatment of a single research area or of a facet of a research area within a larger field of study. The Memorandum presents the background, objectives, scope, summary, and conclusions, as well as method and approach, in a condensed form. Since it presents views and conclusions drawn during the progress of research activity, it may be expanded or modified in the light of further research.

RESEARCH NOTE

A Research Note is a working paper that presents the results of study related to a single phase or factor of a research problem. It also may present preliminary exploration of an educational policy issue or an interim report which may later appear as a larger study. The purpose of the Research Note is to instigate discussion and criticism. It presents the concepts, findings, and/or conclusions of the author. It may be altered, expanded, or withdrawn at any time.

CONTENTS

Executive Summary ix

I INTRODUCTION 1

II RELEVANT SOCIETAL CONDITIONS 5

Socioeconomic Needs and the Economy 5
The Demise of the Extended Family and Community 8
Equal Rights 11
The Economically Disadvantaged 16
Early Education as an Instrument of Social Reform 17
Presumed Parental Child-Rearing Inadequacy 18
Summary 20

III THE CONSTITUENCY 23

Stakeholder Groups 25
Summary of Objectives 30

IV THE ISSUES 31

The Societal Issue 31
The Moral Issue 32
Scientific Issues 33
Pragmatic Issues 35
Office of Education Issues 35

V THE NEED AND COSTS OF DAY CARE 39

Current Need 39
Characteristics of Current Child Care Arrangement Facilities 42
Types of Day Care Arrangements 42
Hours Spent in Day Care 44
Quality of Care 44
Day Care Staff 45
Day Care Facilities 46
Developmental Care 46
Potential Demand 49
Costs of Day Care 51
Summary 53

CONTENTS

VI	THE FEDERAL EFFORT	55
	Historical Overview	55
	The Current Effort	56
	OE and OCD	59
	Research and Development	61
	Community Coordinated Child Care	63
VII	THE RESEARCH EVIDENCE	65
	Overview	65
	The State-of-the-Art	68
	Assessment Instruments	69
	Research-Based Rationale for Early Childhood Education	72
	Relevant Research Hypotheses and Views	79
	Biological Factors	80
	Cognitive Versus Total Development	82
	IQ and Competence	83
	Heber's Experiment	84
	The Time Factor	85
	Plasticity of Intellectual Development	86
	Universal Early Schooling	86
	Family Versus Institutional Care	87
	Family-Centered Approaches	87
	Segregation of Children and Parents	91
	Group Care in Other Countries	91
	Summary	93
VIII	RECOMMENDATIONS AND CONCLUSIONS	95
	Plausible Alternative OE Approaches	100
	Proposed Additional Federal Program	102
	Long-Term Future Trends	102
	Conclusion	106
IX	REFERENCES	109
APPENDIX A		A-1

ILLUSTRATIONS

1	Types of Child Care Apparently Needed or Demanded by Stakeholder Groups	29
2	Expressed Concerns of Invited Witnesses Testifying at the Senate Hearings on Comprehensive Child Development Act of 1971	47
3	Federal Agency Programs in or Related to Early Childhood Education, FY 1969	57
4	Current Early Childhood Education Programs of OCD and OE	60
5	Periods in the Historical Development of Pediatrics	67
6	Estimated Number of Children with Handicapping Conditions	81
7	Years of School Completed by Two Age Groups: United States, March 1971	103

TABLES

1	Reasons for Women Working	7
2	Changing Attitudes and Circumstances of the Family and Community Reflected in Child Care Demand	10
3	Opinion on Efforts to Strengthen or Change Women's Status in Society	13
4	Opinion on Activist Women's Groups	14
5	Apparent Views of Congress and the President on Federal Role in Early Childhood Education	24
6	Apparent Circumstances, Views, and Child Care Needs of Stakeholder Groups	25
7	Opinion on Day Care Centers	28
8	Estimated Number and Capacity of Day Care Centers and Family Day Care Homes	41
9	Percent Distribution of Child Care Arrangements, by Age of Children	43
10	Apparent Goals of Early Childhood Education Programs	48
11	Likelihood of Women Looking for Work if Reliable Day Care Centers were Available	50
12	Annual Costs of Child Care, by Level of Quality	52
13	Participating Agencies in the Federal Interagency Panel on Early Childhood Research and Development	62
14	Illustrative Schema for Psychosocial Deprivation and Development	70
15	Selected Recent Research Programs in Early Childhood Education	76

6/7

TABLES

16 Immediate Impact and Long-Term Effects of Selected Early Childhood Programs, by Programmatic Focus 77

17 Observed Positive and Negative Differences Between Home and the Day Care Environments in Factors that Influence Child Development 88

18 Annual U.S. Birth Rate 103

EARLY CHILDHOOD EDUCATION:
PERSPECTIVES ON THE FEDERAL AND OFFICE OF EDUCATION ROLES

Executive Summary

Problem

There is a persistent and increasing demand for Federally funded and universally available early childhood education programs. The proponents for such programs span the socioeconomic spectrum of the society, thereby insuring its persistence as a powerful political issue. Involved are questions regarding the extent of societal responsibility for child-care and rearing, and the effects of calculated societal interventions on the development of the infant and young child. The specific issue relates to the question of the appropriate Federal and Office of Education roles in early childhood education; i.e., what Federal and Office of Education programs or approaches will meet the objectives and diverse needs of the proponents for preschool programs. In particular: (1) is there a need for some form of Federally Funded early childhood programs; and (2) if so, should they be "educational" in the traditional sense of the term?

Background

Among the societal conditions that reinforce the demand's urgency, these appear most salient: the socioeconomic needs of families, and the critical need of the economy for the paid work of women; the demise of the extended family and community; the drive for equal human rights for women; the existence of poor and near-poor families who essentially are isolated from the fruits of our socioeconomic progress as a nation

and alienated from its institutional forms; the belief that education--in this case early education--is an effective instrument of social reform; and the apparent feeling on the part of a relatively small but growing number of parents that they are less adequate to the child-rearing role than are the expert-devised group programs. No one of these conditions is singly responsible for the perceived need for preschool programs. Rather, they are to greater or lesser degrees interactive with each other and with other conditions.

Early childhood programs are viewed as having a diverse set of objectives that address the perceived needs of society or parents or children.

Societal objectives include:

- Prevention or amelioration of life conditions of children that may lead to dependency, poverty or emotional instability
- Reduction of welfare rolls
- Aid in resolving the unemployment problem by providing job openings in a new child care program
- Strengthening of families who might otherwise slip into dependency by supportive programs and services.

Objectives relevant to parents include:

- Allowing mothers and single heads of families to support or partially support their families
- Allowing welfare and AFDC parents to receive training or education so that they may enter the employment market
- Allowing mothers to be "fulfilled" by freeing them to work
- Providing "parking" places for children while parents are shopping or otherwise occupied.

The primary objectives for children are:

- To provide growth and learning environments that will allow for their optimal development in all component domains

- To provide for the children's physical safety and supervision through appropriate adult guidance in the absence of parents.

Recommendations and Rationale

There are two quite separate issues that tend to confuse the early childhood education picture:

- Should the society displace the family as the principle child-rearing agent?
- How are the needs of disadvantaged and handicapped children and those with absent parents (usually employed) to be met?

The reply to the first question is unquestionably negative. There is a good deal of consensus that the family is the appropriate and most adequate child-rearing agent. In general, it is when parents are overwhelmed by problems (many of them related to inadequate income and education) that they become inadequate to the child-rearing role. In these situations, they require and should receive societal aid.

The second issue, involving millions of children (but still a minority of them), does concern us. Clearly, there is a societal responsibility to address the needs of disadvantaged and handicapped children and those of working parents who lack access to appropriate child care. OCD has been designated as the planning and coordinating agency. As the agency that administers Head Start and the child health and welfare mission of the Children's Bureau, OCD has significant responsibilities in the early childhood field. The Office of Education also has mission and program responsibilities, as mandated in the Elementary and Secondary Education Act and the experimental Follow Through program. All the Federal agencies devoted to human services--from health and nutrition to education--have significant roles to play.

We conclude that it would be desirable for OE to maintain its current low profile in the preschool field until more is known about the relative merits of different kinds of day care programs. OE might utilize this period to increase basic knowledge and operational program efficacy as preparation for the time ahead when it may be called upon (1) to foster and support a lowered school entrance age, or (2) to provide the rationale for the undesirability of early schooling as a universal program, or (3) to provide a variety of child care resources to meet the diverse needs of different child populations.

Reasonable programmatic approaches for OE to pursue at present include the following:

- Increase basic research into both early and later developmental processes, to include not only intellectual development but, equally urgent, the socio-emotional and motivational domains, among others.
- Develop and monitor a small number of pilot programs to test the efficacy of school-based and articulated early childhood programs--including special target groups where careful exploratory observational work should be done (e.g., Indians, Orientals, Puerto Ricans, Mexicans) to see where, when, how much, and what kinds of interventions can contribute to the unique child rearing practices of these groups.
- Train cadres of early education facilitators who can provide technical assistance to local communities, counties or regions, and states.
- Develop, test, and disseminate early education curricula for school-based programs, child care centers, and family day care homes.
- Develop, test, and disseminate early education curricula for training of teachers and auxiliary personnel.
- Develop, test, and disseminate early education instructionsl materials, including toys, games, and appropriate technology.
- Develop a variety of models of facilities that will appropriately house programs of various sizes and kinds.

OCD, with mission and programmatic responsibilities that span the birth-to-school-age period, and with programs that address the physical, cognitive, social, and emotional development of children, should expand its efforts to better meet the evident child care needs.

For the longer term, a major Federal thrust toward strengthening the family as a social unit seems highly advisable. This would involve many agencies besides OE, and might include such components as more equitable distribution of income, implemented full-employment policy, and expanded health, nutrition, and social services. In brief, the rationale for this conclusion is that:

(1) Child care resources must be provided for parent-absent, disadvantaged, and handicapped children. Such care often requires long hours of the day and may involve child-rearing as well as care. Thus, the child's physical, cognitive, social, and emotional needs must be met. OCD seems to be the appropriate agency here.

(2) Early childhood programs are still experimental, and the long term effects of a cognitively oriented regimen on child development and later competence are not adequately known.

(3) Research findings to date do not show significant differences in later academic achievement and intelligence between disadvantaged children who have and have not had a special preschool experience. A possible exception occurs when home, preschool, and school environments are all changed significantly and concurrently.

(4) The constituency for child care programs is broad and growing, for diverse reasons, among groups that span the socio-economic spectrum. It is premature, to say the least, to assume that all this child care should have a strong cognitive orientation.

(5) There is increasing recognition of the importance of parents as the child's first and most significant teachers. Thus a likely future emphasis may be to provide ways to support parents in assuming more active, more aware roles in their children's development. Such programs as group or media parent training, parent information materials, educational toy libraries, and so forth, may be appropriate.

EARLY CHILDHOOD EDUCATION:
PERSPECTIVES ON THE FEDERAL AND OFFICE OF EDUCATION ROLES

> Whenever men seek to change ancient human practices, they are wise to heed the physician's dictum: Primum non nocere: "First, do no harm," or "Take care that the remedy is no worse than the disease."

I INTRODUCTION

It has become characteristic of our nation instinctively to relegate to the educational establishment for resolution any social problem even remotely related to the educational system's mission. Having thus "solved" the problem by assignment, the nation promptly forgets it--until it emerges again as an as yet unresolved crisis. The nation requires educator-statesmen to differentiate forcefully on specific issues: (1) what the educational establishment is capable of accomplishing under current conditions; (2) what it might accomplish given certain specified circumstances; (3) what can be done in cooperation with other government bodies; and, most important of all, (4) what it cannot do at all. This demand for decisions is as strong in the field of early childhood education as it is in other realms of national concern. The objective of this paper is to provide information of relevance to such a differentiated analysis of policy issues in early childhood education.

Public policy issues arise out of perceived dysfunctions within the society. They provide rallying points for a multiplicity of competing

forces within the body politic, each with a different point of view, often vehemently espoused. Their programmatic resolution seeks to honor as broad a spectrum of these perspectives as appears rational. In our nation, with but 9 percent of the work force self-employed and with societal forms increasingly interlocked, public policy issues arise almost invariably and primarily as a result of socioeconomic dysfunctions. The national issue of publicly supported programs for young children is no exception.

Although traditionally the family has been the primary institution for child care and rearing, various groups have focused on publicly-funded preschool programs as a way to resolve basic personal-societal* problems. And the demand for such programs has grown louder and more insistent. The President's December 9, 1971 veto of the Child Development Act, S. 2007 has in no sense stilled the clamor for such programs. For the need arises from fundamental conditions within the society, manifested in a diversity of demands, varying with the specific circumstances of individual group proponents. They range from implicit or explicit claims of primary societal responsibility for the care and nurture of the young

---

* "Personal-societal" is hyphenated deliberately, for wherever men live in groups, the two are in reality not distinct. When we are in the midst of an environment, we are not aware of its effects and characteristics--thus, when people lived in closely knit communities, both as constituent parts of and beholden to their infrastructures, many needs were met in unobtrusive, less conscious ways than at present. The effects of the industrial revolution--in fragmenting communities and segmenting and dehumanizing people--are ending with its slow demise. Our social action efforts as a nation represent our conscious attempts to reconstruct the community (i.e., to reaffirm the responsibility of all to each member) in ways relevant to our needs in the emergent postindustrial American society. The fact that the Federal government is called upon to foster and support this effort does not change the character of the personal-societal relationship; it simply reflects its broader base.

to a desire for an appropriate "nursery school" experience for children. The fact that the demand span the socioeconomic spectrum testifies to the need and ensures its persistence as a powerful political issue.

Our concern in this paper is to provide information relevant to the issue of societal responsibility in preschool child care and socialization. We are attempting the admittedly difficult task of differentiating into more cogent segments that tangled mass of expectations, hopes, and needs that fall under the rubric of early childhood education. Viewing the broad Federal effort in early childhood development--that spans six Federal departments and seven agencies--our analysis seeks to provide information useful to OE in the making of both short term and long term policy regarding early childhood education.

More specifically, we will briefly describe relevant conditions that appear to underly the demand for universal preschool programs, identify the proponents of the programs and their perceived needs, describe the Federal role in early childhood, and examine the evidence regarding the efficacy of current sponsored programs, thereby providing an analytic basis for OE decision-making regarding its role in early childhood education.

The preschool period is viewed broadly as ranging from conception through the 3rd grade of elementary school and our concern extends over this period. We will consider the rationale for universal preschool programs since both the proponent demand and the legislative intent is to provide programs for all who desire access to them. Further, we need to consider the kinds of programs that appear appropriate for various groups--particularly the child populations viewed as "at risk" on some dimension--as a basis for determining what OE's role should be.

II RELEVANT SOCIETAL CONDITIONS

Among the societal conditions that create the demand for publicly funded preschool programs and that reinforce its urgency, these appear most salient: (1) the socioeconomic needs of families that compel mothers to enter the work force, and the critical need of the economy for the paid work of these same women; (2) the demise of the extended family and small community; (3) the drive for equal human rights and for a greater number of options and life choices, including that of women; (4) the existence of a segment of the population--termed poor and near-poor--who essentially are isolated from the fruits of our socioeconomic progress as a nation and alienated from its institutional forms; (5) the belief that education--in this case early education--is an effective instrument of social reform; and (6) the apparent feeling on the part of a relatively small but growing number of parents (reinforced by some child development specialists and private enterprise ads for day care) that they are less adequate to the child-rearing role than are institutional programs devised and run by "experts." No one of these conditions is singly responsible for the perceived need for preschool programs. Rather, they are to greater or lesser degrees interactive with each other and with other conditions. However, for simplicity, they are discussed below as though they were distinct in their impact.

PS 006085

Socioeconomic Needs and the Economy

Exploding the myth that the female labor force is largely made up of bored wives and mothers anxious to get out of their homes, Bell (1972) emphasizes the crucial importance of working women as contributors both

to their own families' incomes and to the growth of the national economy. She states:

> ... women workers are more important than ever before in maintaining their families' standard of living, in lifting poor families out of poverty, in serving as the sole breadwinner for many families, and in contributing to economic production and growth .... (p. 1)

Stating that the "model" American family of father, mother, and two children is scarcely a model at all, since it actually encompasses fewer than one-sixth of all families, Bell indicates that almost that same proportion of families are headed by women (6 million families with 20 million members--half of whom are dependent children). Each year, hundreds of thousands more children live in single-parent families owing to the increasing rates of separation and divorce (Profiles of Children, 1970). This increases the number of parents who must work and therefore must seek care for their children.

Further, for many intact families, the earnings of the wife "spell the difference between poverty and scraping by"; and the paid work of many more wives insure their families "moderate comfort rather than just scraping by." Bell provides the following 1971 data (p. 14) in support of these statements:

Number of Families with Working Wives	Wife's Annual Earnings	Husband's Annual Earnings
1 million	$2,000-$4,000	Less than $7,000
8 million	$4,000-$7,000	Less than $10,000*

In 1971, of the 16.5 million families with both parents employed, the wife's median annual earnings were $3,000 and the husband's were $9,000.

---

* Two-thirds of husbands earned less than $10,000.

Table 1 presents the results of a Harris survey of the reasons why women work and reveals that 41 percent of the women work to support themselves or their families and another 48 percent work to "bring in extra money." Only 11 percent work for other reasons.

Table 1

REASONS FOR WOMEN WORKING
(Percent of Working Women)

	To Support Self	To Support Family	To Bring In Extra Money	To Keep Busy	Not Sure
Single	70%	10%	15%	5%	-%
Married	3	14	69	12	2
Divorced/Separate	39	58	3	--	-
Widowed	68	18	7	7	-
Black	24	31	40	5	-
White	23	16	50	10	1
Cities	31	18	41	8	2
Suburbs	23	16	50	10	1
Towns	22	21	48	8	1
Rural	15	17	56	11	1
Under 30	31	17	44	8	-
30 to 39	9	21	62	6	2
40 to 49	8	22	58	11	1
50 and over	38	13	37	12	-
Under $5,000	42	27	27	4	-
$5,000 to $9,999	24	20	48	7	1
$10,000 to $14,999	9	16	66	8	1
$15,000 and over	15	7	54		2
Total	23	18	48	9	2

Source: Louis Harris and Associates, Inc., A Survey of the Attitudes of Women on Their Role in American Society, New York, 1970.

In addition to meeting their families' needs, the increasing number of working women (mostly wives) over the past 15 years has been largely responsible for the growth in the total national production and income. Between 1950 and 1970, while the national product has more than doubled, the proportion of men in the labor force has been declining, from 86 percent to 75 percent. Had women not augmented the labor force, our national product and income would be considerably lower (Bell, 1972).

The pamphlet entitled "Women Workers Today" (1971), published by the Women's Bureau, DOL, indicates that women "contribute substantially to the incomes of their families." It also states: "Women supply many of the workers needed today for growing industries" and that their services are essential to the "continued functioning of vital health and educational services, factories, stores, and offices." In a large number of families, the father's annual earnings alone are insufficient to provide the family with a moderate standard of living. Clearly, women workers are essential contributors both to the national economy as now constituted and to the basic financial needs of their own families.

The Demise of the Extended Family and Community

Historically, the primary socializing agents of the infant and child have been the family and extended family, merging into and aided and supported by the surrounding community. Far more frequently than not, mothers not only nurtured their infant, but also were busy with a multitude of other tasks and therefore required and received the ready assistance of relatives, older siblings, friends, or hired help. For mothers to work is not a new phenomenon: what is new is the absence both of the mother herself, who often works some distance away from the homestead, and of others to help with the children. Over the years, household workers have become difficult to obtain and their wages are beyond the economic reach of many families.

Thus increasingly, in our highly mobile and atomistic society, neither the extended family nor the community remain intact to perform the traditional child care roles. In fact, ours may be the first society in which large groups of mothers have reared their children essentially alone. For example, part of the rebellion of "affluent" mothers probably has a lot to do with the unremitting nature of the demands placed upon them and the loneliness of their role (since fathers are often absent not only for long hours every workday, but frequently on week-ends as well). The situation is even more poignant in the case of the many single parents without even a mate to help or support them in the child-rearing task. Table 2 presents our summary of the changing attitudes and circumstances which reduce the supports of extended family and community that formerly underpinned the nuclear family.

Clearly, the fact that the extended family and community are missing does not diminish the need for the myriad ways in which they complemented, supplemented, aided, and supported the parents and child--and from which tasks they in turn derived a profound sense of human purpose and meaning. When a basic need persists subsequent to the disappearance of the traditional resources for its fulfillment, inevitably demands will be made on the larger society to assume that burden. Thus, increasingly, extra-familial forms and institutions have been sought and consequently these have been competing with the family as the primary socializing agent of the child.* These forms and institutions are evident both in the existence of and demand for growing numbers of quasi-public, private, and proprietary arrangements for the care and rearing of children. Also, the experiments in communal life styles of some of our young people represent

---

* As the influence and impact of extra-familiar institutions increases and broadens, it is hardly surprising that parents wonder at the divergence between their own and their offsprings attitudes and behavior.

Table 2

CHANGING ATTITUDES AND CIRCUMSTANCES OF THE FAMILY
AND COMMUNITY REFLECTED IN CHILD CARE DEMAND

	More Typical of Past	More Typical of Present
Extended family		
Physical presence	Sometimes several generations present	Often absent due to mobility
Child rearing and care	Many family members participate actively	Usually not available, or "by appointment"
Affective aspects	Great pleasure expressed in children: warmth between parents and child reinforced	Accent on youth: grandmothers not anxious to assume role: wish "to do own thing"; therefore parents and child feel rejected
Cultural background	Stable-consistent over generations	Mobility may bring conflicting values
Shares experience/ information	Immediately available source	Not readily available
Nature of mother role	Shared task with relatives, friends	Mother and father alone; no help from others
Importance of mother and father roles	Very worthwhile	Less important than careers
Hired babysitter	Not needed	Needed but may be difficult to find or afford
Marital situation	Usually intact family	Much higher proportion of single parents
	Family resides within extended family complex	Nuclear family resides alone
	Usually shared cultural values between parents and extended family	More marriage between members of groups with conflicting cultural values
Community		
Neighbors/friends	Reinforced warm feelings of the parents and child	Neighbors may be strangers, few close friends
Importance of parental role	Considered important	Not as important as career
Community responsibility to the child	Child protected by community concern for the family and child	No one responsible other than immediate family

a conscious attempt to recreate the "lost" community as a functional entity that aids in the child care tasks and meets adult human needs as well.

Equal Rights

The struggle to achieve human rights is a universal and timeless struggle--limited to no single sex or race or ethnic group or stage of life. At present, among the most visible and active groups in this struggle are the women's liberation organizations. Their goal is to achieve a sense of personal dignity, a sense of their own worth as competent human beings separate and apart from their role as wives, mothers, or homemakers. Feeling that the society neither honors nor values the traditional womanly roles, women's liberation seems to be saying: "We can prove our worthwhileness by entering and competing in the arena that the society seems to value--the market place."

For those women who no longer are involved in meeting survival needs, who are economically and culturally affluent or comfortable, the drive to find purpose and meaning in their lives--to feel that they are an integral part of the societal endeavor--is powerful indeed. This need of women may appear to be a separate need that has very little to do with the needs of children for appropriate nurturance and socialization. It is subject to the interpretation that the group that traditionally shouldered these tasks wants to go on strike or to abdicate, and in a limited number of cases, the interpretation applies.

However, for a good many activists and for a large proportion of women whose feelings are tapped informally or through surveys, the deeper issues of equality and self-worth call forth their allegiance. Harris polls conducted in 1970, 1971, and 1972 reveal a significant shift in the

"favor/oppose" attitudes of men and women toward efforts to strengthen or change women's status in the society (see Table 3 for detailed results):

	Women		Men	
	Favor	Oppose	Favor	Oppose
1970	40%	42%	44%	39%
1971	42	43	n.a.	n.a.
1972	48	36	49	36

In 1970, 40 percent of the women favored such efforts but by 1972, the percentage had jumped to 48 percent. Since it is the younger and better educated women who are strongly for such efforts, an increase can be expected in the percentage favoring improved status for women as time goes on. The percentage of men who favor improving women's status has also grown in recent years.

Table 4 reveals the shift in sentiment from 1970 to 1972 on several key questions. Some of these questions and results in the 1972 poll were:

- If women don't speak up for themselves and confront men on their real problems, nothing will be done about these problems: 71 percent of the women and 67 percent of the men agreed;
- Women are right to be unhappy with their roll in American society but wrong in the way they're protesting: 51 percent of the women and 44 percent of the men agreed;
- It's about time women protested the real injustices they've faced for years: 48 percent of the women and 41 percent of the men agreed.

Clearly significant changes in attitudes are occuring.

Table 3

OPINION ON EFFORTS TO STRENGTHEN OR CHANGE WOMEN'S STATUS IN SOCIETY
(Percent)

	1972						1970					
	Women			Men			Women			Men		
	Favor	Oppose	Not Sure	Favor	Oppose	Not Sure	Favor	Oppose	Not Sure	Favor	Oppose	Not Sure
Single	67%	20%	13%	61%	27%	12%	53%	33%	14%	58%	31%	11%
Married	46	38	16	47	38	15	38	45	17	41	41	18
Divorced, separated	57	29	14	58	27	15	61	27	12	44	42	14
Widowed	40	40	20	62	19	19	36	41	23	40	33	27
Black	62	22	16	47	27	26	60	20	20	52	27	21
White	45	39	16	50	36	13	37	46	17	41	40	19
18 to 29	56	30	14	61	30	9	46	39	15	53	34	13
30 to 39	49	36	15	47	33	20	40	44	16	37	45	18
40 to 49	42	41	17	50	35	15	39	43	18	52	34	14
50 and over	41	40	19	44	40	16	35	45	20	38	41	21
8th grade	42	34	24	38	40	22	36	38	26	40	37	23
High school	43	40	17	45	41	14	38	45	17	43	40	17
College*	57	32	11	62	27	11	44	40	16	49	38	13
Post-graduate*							58	32	10			
East	49	34	17	43	43	14	41	40	19	45	38	17
Midwest	46	38	16	54	32	14	38	46	16	43	40	17
South	46	37	17	48	35	17	39	41	20	42	39	19
West	51	36	13	56	32	12	42	43	15	47	38	15
Cities	52	31	17	50	33	17	47	36	17	46	36	18
Suburbs	51	35	14	52	37	11	41	44	15	43	40	17
Towns	44	38	18	52	32	16	37	46	17	43	43	14
Rural	40	43	17	47	38	15	34	45	21	43	38	19
Total	48	36	16	49	36	15	40	42	18	44	39	17

* In these results, women who have completed post-graduage work are included in the "college" totals.

Source: Louis Harris & Associates, The 1972 Virginia Slims American Women's Opinion Poll, New York, 1972

Table 4

OPINION ON ACTIVIST WOMEN'S GROUPS
(Percent)

	1972						1971	
	Women			Men				
	Agree	Disagree	Not Sure	Agree	Disagree	Not Sure	Women Agree	Men Agree
If women don't speak up for themselves and confront men on their real problems, nothing will be done about these problems.	71%	23%	6%	67%	28%	5%	66%	64%
Women who picket and participate in protests are setting a bad example for children. Their behavior is undignified and unwomanly.	60	32	8	57	35	8	61	57
Leaders of women's organizations are trying to turn women into men and that won't work	51	43	6	52	42	6	49	51
Women are right to be unhappy with their role in American society but wrong in the way they're protesting.	51	34	15	44	40	16	45	44
It's about time women protested the real injustices they've faced for years	48	43	9	41	50	9	38	36
It's women who have nothing better to do who are causing all the trouble.	42	49	9	46	45	9	46	48

Source: Louise Harris & Associates, The 1972 Virginia Slims American Women's Opinion Poll, New York, 1972.

Margaret Mead (1971), ever sensitive to the undercurrents of the times, points to a necessary and emerging trend:

> I think we'll be bringing girls up with more sense of themselves as people, and that they're going to be people all the way through. If they choose parenthood, they'll choose it much more as they've chosen vocations, and much less as if it were just something the neighbors are doing. (p. 53)

She further indicates that the greater freedom of men to choose their own roles and life styles is interwoven with the greater freedom of women to do so also:

> By dint of telling women that their major job was to be wives and mothers, we told most men their major job was to be breadwinners and very much limited the number of men who could do the things they wanted to do most . . . . When you shut women up in a home and require wifehood and motherhood, you shut men up and require husbandhood and fatherhood at the same time. As we reduce the requirements for motherhood, we reduce the requirements for fatherhood. And we'll release a lot of people to be individuals and to make contributions as individuals, rather than as parents. (p. 53)

In a more profound sense, the need on the part of women for a sense of personal worth, for affirmation from the American society of the value of their efforts (no matter how it is disguised or expressed) is central to whether children in their turn are raised with a sense of their own self worth. Many mothers feel demeaned by their life circumstances and by the manifest values of what they view as a male-dominated, technological society. Carrying within themselves the weight of the frustrations of past generations, they tend to take out these frustrations on their children, particularly their male children, who later in turn, as husbands, take them out on their wives, who in turn take them out on their children--in an endless psychically damaging cycle to men, women and children.

The Economically Disadvantaged

Although it has been often said that a nation's children are its most valuable natural resource, only in the past few years have we as a society become aware of the numbers of children who lack many of the elements essential to their optimal development. Studies of the nutritional status, general health, and life circumstances of our child population have underscored the magnitude of the deprivations and the complexity of the ameliorating or preventative task. Further, a growing body of information has suggested that a child's earliest experiences may have significant consequences for his development. Within this context, many now look to child care programs as a means by which the society can provide to each child those social, emotional, intellectual, and physical nutrients that will enhance his development.

More equitable distribution of the nation's resources and a higher quality of life for those groups who share too little in the nation's abundance are both moral and pragmatic objectives. Present child care programs provide a two-pronged attack on the problem: (1) through Head Start and similar programs, which are expected to enhance the participating children's development by providing an appropriate learning environment sufficiently early to prevent impairment of results; and (2) through job training programs for parents (with day care for their children), on the assumption that training will open doors to improved employment opportunities and thus allow parents to purchase a sufficient share of the nation's resources to meet their family's needs. What remains at issue is the extent to which these assumptions realistically reflect the true

situations of children and parents, and whether the "corrective" programs are adequate to resolve the problems they seek to address. These, along with other programs, represent what appear to be limited, uncoordinated, and insufficient attacks on relatively small aspects of basic, and seemingly intractable, socioeconomic problems which affect the total society. The issue of more equitable distribution of the nation's resources has yet to be grappled with in the fundamental way--and the hard choices made--that its significance requires. The basic ideas are cogently expressed by Sir Geoffry Vickers.

According to Vickers (1971), the households which form the basic units of consumption of a nation derive their right to share in its production by virtue of membership in: (1) the economic community, through employment, and (2) the political community, through citizenship. He states that these two systems increasingly conflict and that:

> In both [systems] the allocative decisions are increasingly made by what are essentially political negotiations. In both, the underlying ethical assumptions are confused, conflicting, and in rapid change. Neither better economic controls nor (still less) improved technology can solve present distributive problems. These demand radically revised distributive ethics to meet the mounting demands of the physical and social environment and to distribute the shrinking balance acceptably between consumers. . . .
>
> I conclude that the continuing economic and technological development of the world . . . depends absolutely on radical changes in the attitudes and ideas of people already born about the distribution of income between themselves and their neighbours, between present needs and future needs and between collective use and personal use. (pp. 116-117)

Early Education as an Instrument of Social Reform

It would appear that having exhausted most other avenues for quick and easy solutions of fundamental societal problems, the nation has discovered the infant and young child as the repository of potential

societal salvation. The view is held that ever earlier intervention programs will serve to prevent future problems. But since the goals of such programs are multiple and divergent--ranging from the view that child care programs are vehicles for reducing the welfare rolls to their utility in potentiating the development of the educationally and economically disadvantaged--and since the relationship between these programs and later life "success" has yet to be demonstrated, the expectation that such programs will resolve societal problems appears ill-founded. Further, to the extent that they divert attention from serious efforts to grapple with the broad and basic issues that affect the total society, they will have detracted from the nation's long term interests.

However, programs for young children do have a legitimate role to play and a contribution to make to the resolution of societal problems, but necessarily limited ones. For example, concurrent programs on a number of levels and using a variety of approaches--income maintenance, job training, career education, compensatory education, early childhood education, family planning--are converging in the effort to resolve the poverty problem. The convergent effects of these programs may, at some later point in time, be beneficient or may be frustratingly exacerbating. Whether the effort will be sufficient over time to effect the necessary changes without conscious and deliberate effort to deal with the more fundamental conditions and the value postulates that energize the conditions, remains at issue.

Presumed Parental Child-Rearing Inadequacy

There is a feeling abroad in the land that the methods parents use in the rearing of their children are less adequate than group programs designed by experts for the optimum development of their children. This feeling is transmitted by the implicit message of some government

programs,* the speeches and writings of a number of child development professionals,† and by the advertising by private and franchised day care proprietors. Further, the effects of rapid technological change, manifested in changing behavior, mores, and values, tend to erode parental confidence in their own ability to rear their children.

The Head Start program may unintentionally convey the impression that economically poor parents (and possibly most parents) are less than able to help their children become competent adults. As Meers (1971) has said:

> Nationally, the oversell of the Head Start Day Care type programs has been accepted by the public with convictions that are not shared by the scientific community that sponsored Head Start. For those families where there is no question of the adequacy of home life, the matter has been complicated further by the position statements of the American Education Association on the presumed salutary qualities of ever-earlier education, and these appear to have escalated popular interests in Day Care. (p. 5)

However, to the extent that parents participate as program staff or as members of policy boards of their children's early childhood programs (as required by law in Head Start programs), these responsibilities would be enhancing experiences for them. Undoubtedly their self-esteem and confidence in their own competence would increase as a result of such active roles. But for cautious or timorous parents, who may already suspect that

---

* The boarding schools for American Indian children are an extreme example of well-intentioned government assumption of the child education and rearing which have resulted in some unexpected deleterious and sometimes tragic consequences.

† Bettelheim (1969) has advocated group rearing of children similar to the Israeli kibbutzim programs. However, such programs may affect the children's sense of attachment to and dependence upon adults. Another type of communal child-rearing, as practiced by the Hutterites (who have practiced communal child rearing for four centuries), the parents remain directly involved with and responsible for the care of their children. After weaning, infants and toddlers receive much of their care from older girls while the mother helps with communal chores. Beginning

they are not adequate to the parental role, the apparent advocacy of preschool programs by child development specialists and the sometimes exaggerated claims of day care advertisers may reinforce their doubts and make them wonder whether others may not do better by their children. Other parents, upon discovering that child rearing is a difficult and demanding task, may feel ambivalent about their responsibility and rationalize their support of preschool programs as being better for their children. In addition, the instability evident in changing patterns of behavior and life styles in the society may add to the uncertainty that parents may feel about their ability to rear children. Unintentional through it may be, the message of parental inadequacy that seems to be transmitted in the society needs to be reversed. There is little question that many parents require the aid and support of community resources, but it is necessary that these strengthen their confidence in their role rather than suggest or imply inadequacy on their part.

Summary

We have seen that our "growth"-focused economy and the inadequate earnings of fathers* require that mothers enter and sustain the work force; that the sources of help in child care and rearing traditionally supplied by the extended family and community no longer (or too seldom) are present; that women's liberation groups are leading the struggle for equal women's rights and are demanding child care as one way to free

---

at 2-1/2 years of age, they have their meals with the other 2-1/2 to 5 year olds of the colony and spend the "school day" with their German school teacher and her helpers. But they live with their parents in separate homes, and their other basic needs are met within, or funneled through, the family.

* A statistic that should make one stop and think: 45 percent of white poor and 49 percent of black poor families had fathers who worked all year long at full-time jobs.

them to exercise these rights; that many children lack some or most of the resources that are presumed to optimize their development; and that, to some extent, there is a feeling abroad in the land that parents may be less adequate than institutions for rearing children. Obviously these are conflicting circumstances that relate to the demand for child care. Yet they reflect, or are symptomatic of, far deeper and more fundamental dysfunctions in the society.*

Clearly, there is a widespread demand for publicly funded child care resources. Legitimate questions that require attention include: what groups need what types of child care; how extensive is the need; under whose auspices should it be provided; and what are the effects on development of potential participating infants, toddlers, and young children? Also, are there alternative ways for the society to meet its responsibilities to families and children than extra-familial child care and yet enhance the quality of life for all our people? The following sections are concerned with these questions.

---

* One small example is the increasing separation by age of our people. On the one hand, retired men and women languish without important things to do--suffering from a lack of activity and of a sense of purpose in their lives--while parents struggle with their burdens and responsibilities unaided either in "word or deed."

III THE CONSTITUENCY

In his veto message on the Child Development Act, S. 2007, the President raised a number of issues with respect to Federal involvement in early education. Indicating that there has not been adequate national debate and consensus on this far-reaching topic, the President was unwilling to "commit the vast moral authority of the National Government" to communal rather than family-centered child rearing. Stating that he shares the view of the bill's supporters that its child development provisions make it the "most radical piece of legislation to emerge from the 92nd Congress," Mr. Nixon described the bill as "a long leap into the dark for the U.S. Government and the American people."

Asserting that his administration will not ignore the challenge to do more for America's preschool children, the President insisted that the nation's response must be "a measured, evolutionary, painstakingly considered one, consciously designed to cement the family in its rightful position as the keystone of our civilization."

The President felt that the child care challenge is being met both by such current efforts as Head Start, by increased food stamp and nutrition assistance, by improved medicaid provisions, by liberalized tax deductions for child care for working parents, and by the proposed Family Assistance Program (FAP), (H.R. 1). Table 5 on the following page compares the views of the Congress (as inferred from S. 2007) with those of the administration on a number of important issues. However, there are large groups of stakeholders who disagree that current efforts are adequate and consequently are pressing for the establishment of an increased number of preschool programs by the Federal government.

Table 5

APPARENT VIEWS OF CONGRESS AND THE PRESIDENT
ON FEDERAL ROLE IN EARLY CHILDHOOD EDUCATION

View	Congress	President
Adequate national debate and consensus	Assumed	No
Commits moral authority of government to communal child rearing rather than family rearing	Moot	Yes
Family has primary child socialization role	Qualified yes	Yes
Effects of universal program on family	Strengthens family	Weakens family
Should be universal program available to all children	Yes	No
Should be primarily public, not proprietary programs	Yes: sliding scale payments	No: tax incentives for 97% of employed parents
Day care allows low income mothers to work	If mother chooses	Should work (H.R. 1; FAP)
Child care need has been demonstrated	Yes	No
Needs adequately met by current activities plus FAP	No	Yes
Pragmatic issues:		
Administrative feasibility (S. 2007)	Assumed	No
Adequate qualified staff available	No: training funds provided	No
Costs: estimated $2 billion to $20 billion per year	Necessary	Not justified

Source: Based on Title V: Child Development Programs (S. 2007) passed by Congress, December 7, 1971, and the President's Veto Message, December 9, 1971.

Stakeholder Groups

As we have indicated earlier, there are a number of groups strongly urging the establishment of public programs in early childhood education. Table 6 summarizes the views, circumstances, and child care needs of the various stakeholder groups. The most vociferous representatives of the middle and upper class demand are the women's liberation groups who seem to be saying essentially that the care and nurture of their children is a societal responsibility and that they should be sufficiently freed of household and motherhood tasks to achieve personal fulfillment through careers or extra-home activities.

Lending quiet support to the women's lib demands are large numbers of suburban and other housewives--some of whom exhibit what psychiatrists have referred to as the "depleted mother syndrome"*--who labor essentially alone, without the traditional supports and aid of relatives and friends. These women do not necessarily subscribe to the notion of primary societal responsibility for their children, but may have a vague or more explicit sense that there is something wrong with their lonely role. They would welcome, and in many cases urgently need, a variety of supports during the difficult early child-rearing years. In addition, working women of all classes require adequate care for their children for 10 to 12 or more hours of the work-day or work-night.

---

* Increasingly psychiatrists have been seeing young mothers who are depressed. Some of them are referring to these patients as exhibiting a "depleted mother syndrome." Susan Jenks (San Francisco Chronicle and Examiner, March 5, 1972) describes the "typical" patient of a psychiatric outpatient clinic in Philadelphia as a middle-class housewife in her 30s with at least two small children at home. These women are almost three times more susceptible to depression than their husbands and their symptoms are likely to be "insomnia, crying jags, loss of sexual interest or just a feeling of helplesness about the future."

Table 6

APPARENT CIRCUMSTANCES, VIEWS, AND CHILD CARE NEEDS OF STAKEHOLDER GROUPS

Stakeholder Group	Related Circumstances	View Held on Primary Responsibility for Child Rearing:* (Societal or Familial)	Form of Child Care Demanded or Needed†
Women's lib: largely white upper and middle classes.	Personal fulfillment through career or extra-home activities.	Strong implication of primary societal responsibility.	Ranges from all-day care for career women to part-day for others; availability and choice of options demanded.
Working women: all socio-economic classes.	(1) Many one-parent families; employment crucial. (2) Some families require two paychecks to make ends meet. (3) Others simply wish careers.	Primarily familial responsibility but require societal help.	Day care, Heat Start, Follow Through; 10 to 12 or more hours per day and before and after school care; availability and choice of options demanded.
Suburban and "depleted" mothers: middle and lower classes.	Lack traditional help from extended family and friends in many cases.	Primarily familial--require help.	Crisis, all-day, 24-hour day care; part-day care; nursery schools.
Racial and ethnic groups: economically disadvantaged.	Too many in poverty over several generations; many cases of make-shift arrangements for children when employed; too many children do poorly in school.	Parents consider it primarily familial; experts and decision-makers feel large part of responsibility for change is societal.	Heat Start type, Follow Through; all-day and before and after school care (developmental child care).
Parents of mentally, emotionally, and physically handicapped.	Early education necessary to counteract effects of handicapping condition.	Primarily familial, but society must provide necessary services and help.	Special education; other day care services when appropriate.
Advocates of job training for welfare/AFDC mothers.	Transgenerational cycle of poverty should be broken.	Primarily societal to eradicate social problems that lead to family dependency, but child rearing is a familial responsibility with large societal inputs.	Head Start type, Follow Through; all-day and before and after school care (developmental child care).
Professionals advocating early childhood education.	Special cases of hospitalism, severe abuse and neglect, and depriving home conditions that may lead to school and life failures.	Ranges from primarily societal responsibility to improve conditions and to prevent future problems, to supportive services to make families more effective.	Foster home care, Head Start type, Follow Through; all-day and before school care; developmental infant and child care.
Advocates of programs to create more jobs in the economy.	"Surplus" of teachers; need jobs for less advantaged (paraprofessionals).	Societal responsibility to provide training slots; child rearing secondary.	Any child care program.

* Presumptive evidence only; aided by polls and other written material (including Women's Lib journals and women's magazines, Statement of Findings and Purpose of Senate Bill S. 2007 as as reported in the Congressional Record, September 9, 1971.

† In general, the demand is for a developmental child care program that addresses the child's physical, social, emotional, and intellectual needs. Custodial care is the rule at present, but is viewed as inadequate or harmful.

Among the economically less advantaged groups--at least three-quarters of whom are white--there are also demands for preschool programs. And according to the results of a Gallup poll (see Table 7), 64 percent of the American people support this demand. The most vociferous proponents are the minority racial and ethnic groups, who view preschool programs as the avenue to their child's success both in school and later life, and also as appropriate sources of child care during the mother's work day.

Other proponents of preschool programs for the economically less advantaged are: (1) certain professionals who view early intervention as a way of breaking the transgenerational cycle of poverty, by preventing "depriving" circumstances in the child's early years that result in inadequate school performance; (2) those who feel that work training programs for welfare and AFDC parents will reduce the numbers of dependent families; and (3) those who look upon child care programs as employment opportunities for out of work teachers, paraprofessionals, and auxiliary personnel. From the above, it is evident that the preponderance of needs are "adult" or societal needs rather than primarily child needs.

Figure 1 summarizes the diverse types of child care that each stakeholder group appears to require. It can be seen that the needs vary in length of time (2 hours to 24) as well as in other dimensions. The time dimension alone has great significance in terms of the effects of the experience on the participating children. A child participating in a two-hour group experience will not be affected to nearly the same degree as a child in such a program for 10 to 12 or more hours a day. Obviously, when a child spends most of the waking hours of his early formative years in an institutional setting, to that extent he will be reared by those caretakers and by that group experience, rather than by his family experience.

Table 7

OPINION ON DAY CARE CENTERS

Day care centers for very young children are being set up so that mothers living in poor areas can take jobs and so that children can get early educational training. How do you feel about this--would you favor or oppose having the Federal government provide funds to set up these centers in most communities?

	Percent		
	Favor	Oppose	No Opinion
National	64%	30%	6%
Sex			
Men	59	34	7
Women	68	27	5
Race			
White	63	32	5
Non-white	80	12	8
Education			
College	69	28	3
High School	64	32	4
Grade School	62	28	10
Occupation			
Professional and Business	67	30	3
White Collar	74	22	4
Farmers	50	44	6
Manual	64	31	5
Age			
21-29 years	77	21	2
30-49 years	63	32	5
50 and over	60	32	8
Religion			
Protestant	62	33	5
Catholic	70	24	6
Politics			
Republican	61	32	7
Democrat	69	27	4
Independent	62	33	5
Region			
East	69	25	6
Midwest	62	33	5
South	67	28	5
West	54	39	7
Income			
$10,000 and over	64	32	4
$ 7,000 and over	63	33	4
$ 5,000-$6,999	65	30	5
$ 3,000-$4,999	68	25	7
Under $3,000	65	26	9

Source: Gallup Opinion Index, Report No. 50, August 1969.

	NURSERY SCHOOLS	HEAD START FOLLOW THROUGH	DEVELOPMENTAL DAY CARE IN FAMILY HOME OR CENTER	ADOPTION, FOSTER, AND INSTITUTIONAL CARE	BEFORE AND AFTER SCHOOL CARE	CRISIS 24-HOUR CARE	SPECIAL PROGRAMS
WORKING WOMEN		▲	▲		▲	▲	
ECONOMICALLY AND EDUCATIONALLY DISADVANTAGED	▲	▲	▲		▲	▲	
PARENTS IN JOB TRAINING PROGRAMS		▲	▲		▲	▲	
"DEPLETED" MOTHERS	▲	▲	▲			▲	
VULNERABLE CHILDREN (ABANDONED, BATTERED, ABUSED, AND NEGLECTED)			▲	▲		▲	
HANDICAPPED CHILDREN	▲	▲	▲			▲	▲
SUBURBAN WOMEN	▲		▲			▲	
WOMEN'S LIB	▲		▲		▲	▲	

FIGURE 1 TYPES OF CHILD CARE APPARENTLY NEEDED OR DEMANDED BY STAKEHOLDER GROUPS

Summary of Objectives

Depending on the needs or attitudes of various groups of proponents, early childhood development programs are viewed as having a diverse set of objectives that address the perceived needs of society or parents or children.

Societal objectives include:

- Prevention or amelioration of life conditions of children that may lead to dependency, poverty, or emotional instability.
- Reduction of welfare rolls
- Aid in resolving the unemployment problem by providing job openings in a legitimated new child care program
- Strengthening of families, who might otherwise slip into dependency, by supportive programs and services.

Objectives relevant to parents include:

- Allowing mothers and single heads of families to support their families
- Allowing mothers to work in order to contribute needed additional funds to support the family
- Allowing welfare and AFDC parents to receive training or education so that they may find gainful employment
- Allowing mothers to be "fulfilled" by freeing them to work
- Providing "parking" places for children while parents are shopping or otherwise occupied

The primary objectives for children are:

- To provide growth and learning environments that will allow for their optimal development in all component domains
- To provide for the children's physical safety and supervision through appropriate adult guidance in the absence of parental care.

IV THE ISSUES

Decisions regarding early childhood education programs affect one of our most basic institutions: the family. The family itself is undergoing change, as are the roles and life styles of men and women. Such decisions, too, are complicated by the fact tnat they involve basic societal and moral issues as well as scientific and pragmatic or management ones. More specifically, would the envisioned preschool programs achieve the objectives summarized in the previous section? These questions relate primarily to the Federal and OE roles in early education. The issues are presented below, not because we are prepared to provide answers but rather because it is eminently appropriate, as the President has noted, that they and like issues be debated and thrashed out in the national arena. The succeeding sections provide information of relevance to these issues.

The Societal Issue

The basic societal issue in early education concerns the locus of primary responsibility for the socialization of the child. As we have seen, traditionally this role has resided within the triad of the nuclear family, extended family, and community. Actually it has taken two traditional familial forms and an institutional one, at least for a small proportion of the population: (1) the traditional nuclear and/or extended family form; (2) the traditional family pattern with varying amounts of institutional supplements; (3) the primarily institutional pattern with familial input ranging from substantial to none. Thus, the question is: should the society complement and support the family or move toward its displacement?

As Table 6 showed, most child care proponents seek societal assistance and resources rather than abdication of their primary responsibility for the care and rearing of their children. However, there are those who feel that primary responsibility resides within the society. Although they represent but a small proportion of the child care proponents, the real question is whether their number will increase substantially if the society makes no attempt to deal with the related underlying conditions that create the demand. Obviously imbedded within this issue is the question of the effects of group rearing on our infants and children and thus on the future of the society.

The Moral Issue

The moral issue concerns the extent of society's responsibility for the optimum development of its children. There is little question that millions of young children are not receiving appropriate nutrients for optimal development in all domains. Of these, thousands are neglected, battered, abandoned, or abused children. Others are left to fend for themselves without adult aid or guidance while parents work or are absent, and many more are left in extra-familial situations that range from inadequate to harmful. Where families or parents are either unable or unwilling to provide appropriate nurture, should the society intervene and, if so, what should the state supply? Who shall decide when and under what circumstances the state should act? More basically, what changes are necessary in our institutions and value postulates in order that each member of our human family has access to the prerequisites for a life of dignity and a sense of purpose? Will the difficult nature and complexity of the last question result in a default on the issue by the society?

There are publicly funded programs to meet many needs of children and families. Further, there have been numerous declarations of intent from the White House, the White House Conferences on Children and on

Nutrition, and from a spate of commission reports, Congressional sources, and private bodies, to provide each child with the resources that will optimize his development in all domains. However, the existent programs have been considered insufficient and inadequate in conception and approach. Here again, difficult choices have to be made if the complex needs of the nation's children are to be met.

Scientific Issues

There are a number of scientific issues to which at present there are only partial or no answers. These include the following:

(1) There is an overriding question: what are the long-term effects of calculated societal interventions on the infant and young child? That is, what effects does extra-familial group-rearing have on the participating child's various developmental processes? At what age(s) or developmental stage(s), and under what conditions, are the effects enhancing, moot, or impairing?

(2) Are there "critical periods" in early human development; that is, if the child does not have certain experiences by a certain time in his early development, will their lack mean that certain responses will be absent from his repertoire, thereby limiting his learning modes and his future competence? White (1968) refers to these as "transition periods" that he hypothesizes may occur by maturation, possibly on a "fairly regular schedule." After such a transition occurs, it may be that the child can no longer be provided the missing experiences--or, if he can, only "with great difficulty, by some laborious remedial process which is the educational counterpart of psychotherapy." (pp. 212-213)

(3) How plastic is the human being? To what extent do earliest experiences, even prenatal ones, tend to condition and determine behavioral (including learning) styles and modes? Will ever-earlier structured group experiences inhibit personal and cultural diversity in expression among our people? In large part, the goal and focus of our educational system is to produce highly literate adults with elevated capacities for abstract reasoning. Proposed early childhood education programs are conceptualized as furthering this goal. Does this tendency to emphasize school achievement in terms of this goal inhibit expression in other modes and forms which may be of value to our nation and to the individual? Very little is known at present about the range of human abilities and their expression. And our exploration of human creativity is yet at a primitive level. Although scholastic abilities are important, there are other, equally important aspects of human functioning. In pursuit of cognitive development goals, is there a danger that more elusive aspects of human beings may be neglected. This would be a loss of incalculable proportions--both to the individual and to the society.

(4) In our rapidly changing society, and mindful of question (3), how useful is the concept of middle class values and achievement as the idealized standard for all population groups in the nation?

(5) Does early education significantly improve the possibility of school, and later life, "success?" For all children? For certain groups of children?

Pragmatic Issues

Management issues have to do with the "what" and "how" and "who" questions. Who will manage what programmatic responses and how will they address the expressed needs? More specifically, in terms of the thrust of this paper, what is OE's role in early childhood education and on what criteria might it differentiate its mission from that of other agencies, particularly the Office of Child Development? Also, how might it coordinate relevant efforts both with constituent Federal agencies and with state and local efforts?

Office of Education Issues

To the present time, there has been a fairly clear division between the responsibility of the school and the home for the development of the nation's children. The educational establishment, of which OE is a part, is concerned primarily with providing a structured learning environment deemed to enhance the child's intellectual development; whereas the family--drawing also on the resources of the community--is concerned with the child's total development. In general, the school has been programmatically concerned with the physical (including nutritional aspects), social, and emotional development of only those individuals or populations which exhibit a sufficiently severe deprivation in these domains that it appears to affect their school performance.

For most children, however, it is expected that when they enter school at age five or six, their development in all domains is adequate and that they have come prepared to learn.* That this expectation is not fulfilled

---

* The school attempts in large part to "control" (i.e., to hold constant) the physical, social, and emotional attributes of the students as it concentrates on the teaching-learning tasks. The more permissive or progressive school programs also "control" these aspects of their students but less rigidly, giving looser rein, on the theory that inhibition

for a significant number (though less than the majority) of children has posed a dilemma for the school system. These children constitute what has come to be viewed as the disadvantaged--economically, educationally, socially, or physically (handicapped). And since their individual needs differ in degree and kind, no single program would appear to be adequate.

Further, the varying circumstances and diverse needs of the adults demanding early childhood programs raise questions as to how comprehensive the societal responsibility and effort should be, and for which groups of families and under whose aegis relevant programs should be managed. Fundamental to OE's mission are these issues:

- What part, if any, of the early childhood period is part of the educational continuum?
- Since we do not know whether or at what period early development may be enhanced or impaired by a structured group environment, what action should OE take?

More specifically, a number of issues in early education require analytic treatment:

- Should OE promote the possibility of reducing the age of entrance to formal school one to two years or more (to three or four years of age)? For all children? For certain groups of children? What qualitative changes would this entail in OE's traditional major concern with intellectual development?
- If the school entry age is not lowered, what approaches or programs should OE promote or what stance should OE assume in regard to the missions of the state department of education or to local early education agencies?
- If the age of school is not reduced, what role should OE have in early education and what is its responsibility, if

---

of normal expression acts to inhibit learning as well--for humans function as unitary beings and not in parts. The rebellion against schools is, to a degree, a rebellion against the notion that present attention to affective and other attributes of children is adequate.

any, to families of young children and to both proprietary and public institutional programs and arrangements?

- What are the bases for differentiating OE's role in early childhood development from that of OCD?
- What role, if any, should OE have in all-day programs?
- How early in the life cycle should OE intervene? For which populations?

- What role, if any, should OE play in before-and-after-school programs for preschool and school-age children requiring such services?
- What are OE's research needs for increased understanding of early developmental processes, including the learning process, assuming that such basic knowledge is necessary to undergird current school programs as well as to provide information for potential OE-funded preschool programs?
- Should OE promote additional training programs for teachers and auxiliary personnel for non-school, early childhood programs both public and private?

V THE NEED AND COSTS OF DAY CARE

Many factors, very diffucult to measure, must be considered in any attempt to estimate the current or potential need for child care resources. Among them are the socioeconomic situation of families, the motivations of women for seeking or not seeking employment, the manner in which the society decides to deal with issues of early child development, the thrust of the evidence from research into early education, and the availablility and quality of child care resources.

Current Need

The vetoed Comprehensive Child Development Act referred to "millions of children" needing "developmental" child care. And although certain groups were given priority, the Act affirmed the right of all parents to child care for whatever reason it was desired or needed. The Westinghouse-Westat Day Care Survey Report (1970) states that:

> Perhaps the single most striking fact about day care in this country today is that, despite the manifest need, there is so little of it. The fact is that most of the children of working mothers are cared for in their own homes or in the homes of relatives." (p. v)

The priority groups of children most in need of resources are:

- The children of working mothers or single parents. Nationally, 12 million women work and have 6 million children under 6 years of age, and 20 million school-age children (6 to 17 years of age).

- The economically disadvantaged children of all racial and ethnic groups, including migrant and Indian children. Ten million children live in poverty: six million white and four million black. Three million of these children are

under 6 years of age. It is felt that many of these children benefit from child care programs that address their physical (including nutritional), cognitive, personal, and social developmental needs.

- Handicapped children: there are six million mentally, emotionally, or physically handicapped children. One million of these children are under 6 years of age.
- Children whose parents are in job training programs, are furthering their education, or are ill or for some reason unable to care for them during certain parts of the day.

It is clear that the 46,300 licensed day care centers and family day care homes which serve but 638,000 children are woefully inadequate to the need.* And among the estimated 450,000 unlicensed and unregulated family day care homes, estimated to serve 710,000 children, are those that provide less than adequate or even harmful care (see Table 8).

Beyond the above priority groups, many more families of all socio-economic levels are demanding the establishment of and access to public programs of early child care for the variety of reasons indicated earlier. It is not known, for example, how many of the 60 percent of U.S. families with incomes too high to be eligible for Head Start but too low to cover the costs of child care, either now desire access or would desire it if more programs were available. Nor do we yet know what the impact of the liberalized tax deductions will be either on promoting the establishment of additional proprietary centers or on increasing the entrance of women into the labor market and thereby increasing the demand for public child care programs. Here again we see the circularity of various personal, economic, and social forces as they become a social issue.

---

* See the Appendix for data on licensed centers and homes, by state.

Table 8

ESTIMATED NUMBER AND CAPACITY OF DAY CARE CENTERS AND FAMILY DAY CARE HOMES

Facility	Number of Units	Number of Children Served
Licensed day care centers and homes*		
Day care centers only	17,500	575,000
Day care homes only	28,800	63,000
Total licensed	46,300	638,000
Total unlicensed family day care homes	450,000	710,000

* Only 2% of family day care homes are licensed and serving 55% of children in full-day care; 90% of centers are licensed but they are serving only approximately 4% of children in full-day care.

Source: Westinghouse Learning Corporation and Westat Research, Inc., Day Care Survey-1970: Summary Report and Basic Analysis, April 1971.

Characteristics of Current Child Care Arrangement Facilities

There have been no well-designed national surveys evaluating the quality of child care arrangements in this country. However, the Westinghouse Learning Corporation (1971) conducted a well-designed national survey that has provided valuable information about the existing provisions for care of children and the extent of the potential need.

Types of Day Care Arrangements

Table 9 gives a detailed breakdown of child care arrangements. No attempt was made in the Westinghouse survey to evaluate the quality of care provided, but the survey findings indicate that an estimated 75 percent of all out-of-home care was in family day care homes or by paid or unpaid relatives (p. 182). Also, it is estimated that 55 percent of children in full-day care are in family day care homes--of which nationally only about 2 percent are licensed or regulated. About one-fifth of the children in family homes are under 2 years of age. The others are cared for in their own homes by relatives including older brothers and sisters, or they take care of themselves (see Table 9). Day care centers provided only about 4 percent of the estimated 5.6 million day care arrangements surveyed (p. 182). Sixty percent of the centers were proprietary; but it is estimated that 90 percent of all centers are licensed and therefore subject to public regulation. However, there are serious deficiencies in state licensing practices (Lazar and Rosenberg, 1971).

Nationally, before-and-after school care of school-age children is the least adequate of all child care services. Public bodies--either local school systems or national government organizations--have shown little awareness and no real commitment to the needs of these children.

Table 9

PERCENT DISTRIBUTION OF CHILD CARE ARRANGEMENTS,
BY AGE OF CHILDREN
1965 and 1970

Arrangement	Age of Children			
	Under 6 years		6 to 14 years	
	1965*	1970	1965*	1970†
Care in own home				
By father	14.4	18.4	15.1	10.6
By other relative	17.5	18.9	22.6	20.6
By a nonrelative	15.3	7.3	6.8	4.5
Mother worked during child's school hours	0.8	5.2	21.5	42.9
Total	48.0	49.9	66.0	78.7
Care in someone else's home				
By a relative	14.9	15.5	4.7	7.6
By a nonrelative	15.8	19.0	4.5	5.0
Total	30.7	34.5	9.2	12.6
Day care center	5.6	10.5	0.6	0.6
No special care‡	15.7	5.0	24.3	8.3
Total	100.0	100.0	100.0	100.0

* When several kinds of care were used for the same child, the predominating and most recent child care arrangement is given.

† Child care arrangements on the last day the mother worked.

‡ Includes child looked after self, mother looked after child while working, and other.

Source: Several, as quoted in D. L. Schultze et al., Setting National Priorities for the 1973 Budget, Brookings Institution, Washington, D.C., 1972.

Some of the day care arrangements, including those of family day care homes, apparently are excellent. However, it appears that typically child care resources are inadequate both in quality and quantity. This is particularly true of those available to poor families, except for the federally subsidized programs that serve a small percentage of them.

Hours Spent in Day Care

The number of hours a child spends in day care makes a good deal of difference as to the impact of the experience on his socialization. The Westinghouse-Westat survey (1970), found that over 75 percent of both preschool and school children in out-of-home care spend seven hours or more in such care and almost 50 percent of these children spend nine or more hours in out-of-home care. (p. 181)

Quality of Care

Although, there have been no well-designed national surveys evaluating the quality of day care resources in this country, a national women's organization undertook to survey 700 centers and homes serving 25,000 children in 90 geographic areas around the country in the summer and fall of 1970. Despite the fact that no claims of scientific rigor in sampling and survey techniques are made, their findings, summarized by Keyserling (1972), are significant, graphic, and timely.

The report found that typically the number of facilities and resources are inadequate to the need; for example, only 10 percent or fewer of the children needing care were receiving it in Atlanta, Los Angeles, Cleveland, and Sacramento. More importantly, although many day care centers and homes were well-run and provided adequate care, there were horror stories. For example, 45 day care centers surveyed in one city were reported as having such "unbelievably inadequate" physical facilities and such poor care of

children as to be psychically damaging. In many cases, mothers obviously have had to settle for inadequate or even poorer care because appropriate child care was unavailable. Clearly, there also are good programs for children, but it is essential that none be allowed which are damaging to children. As a nation, we are able to do far better.

Day Care Staff

Since the quality of a program rests heavily on the caliber of its personnel, the Westinghouse-Westat (1970), findings on day care staff are illuminating:

> The people working in day care centers nationwide are, for the most part, neither well-educated nor well-paid. Most directors and teachers do not have college degrees and very few have had special training for day care work, e.g., courses in early childhood development. The median reported salary for both directors and teachers is less than $360 a month. There is not a great deal of experience among those presently employed in day care centers. Nearly a fourth of all staff members had less than a year's experience in group child care, and 51 percent of all staff have been working in day care less than three years. Women comprise almost the entire staff; only about 6 percent (including administrators and maintenance personnel) are men. Contrary to expectations, few day care personnel are volunteers. Less than 4 percent of the staff are volunteers and only 1 percent of them work full-time. Little use is made of teacher's aides. (p. ix).

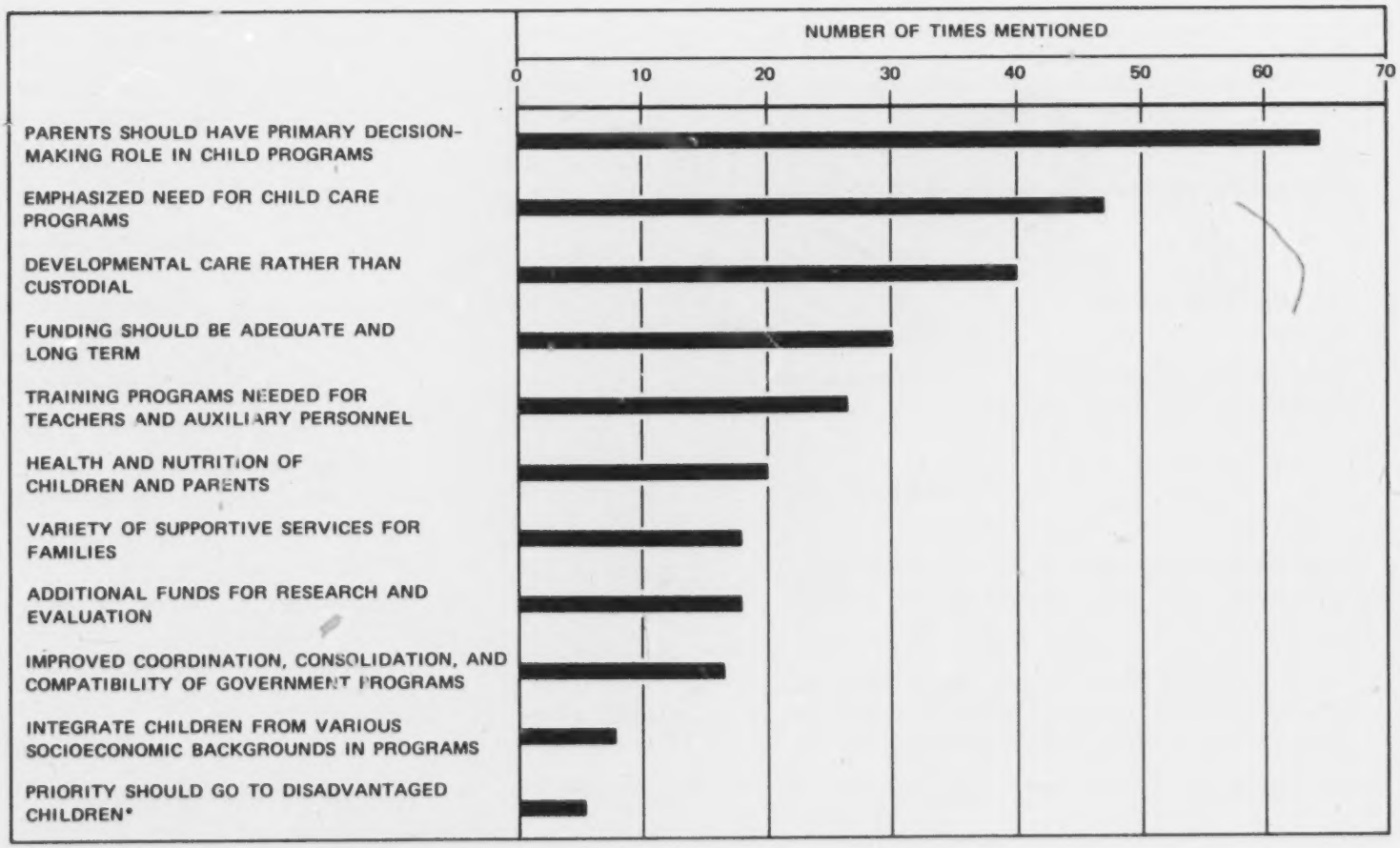
As Keyserling states (p. 66), a major reason for the low quality of staff was due to the low pay levels for both directors and teachers. Generally, both directors and teachers were paid one-half or less than half of the annual earnings of regular school teachers.

Day Care Facilities

Day care centers are usually located in residential neighborhoods and are found in churches, houses, or in buildings specially built as centers. Most centers were found to have equipment (indoor and outdoor) for large and small muscle development, toys, games, educational and art materials, cots and cribs, and audiovisual equipment. Family day care homes--typically serving one or two children--were usually in single family residences and had some equipment for the children.

Developmental Care

Most child care arrangements are custodial in nature rather than developmental; that is, they provide for the physical safety and well-being of the child and do not have program elements aimed at promoting his cognitive, social, and emotional development. The survey summarized by Keyserling found (p. 14) that of the 431 centers visited, only 1 percent of proprietary and 9 percent of non-profit centers had developmental components, while 14 percent of proprietary and 28 percent of non-profit centers had "good" care with some developmental components. The remainder had "fair" (custodial), "poor," or "harmful" care. Yet the intent of the bills before the Congress, the weight of the testimony of invited witnesses before the Senate hearings (see Figure 2), and the demands of stakeholder groups are for developmental child care programs on the Head Start and Follow Through models. As can be seen in Table 10, most of the various preschool programs and child care arrangements do not have developmental care as their primary goal. This is true despite the fact that very large, and growing, numbers of children require care for long hours of each work-day. It is critical that they be cared for in quality programs that provide for their developmental needs in all domains.


NUMBER OF TIMES MENTIONED
0
10
20
30
40
50
60
70
PARENTS SHOULD HAVE PRIMARY DECISION-MAKING ROLE IN CHILD PROGRAMS
EMPHASIZED NEED FOR CHILD CARE PROGRAMS
DEVELOPMENTAL CARE RATHER THAN CUSTODIAL
FUNDING SHOULD BE ADEQUATE AND LONG TERM
TRAINING PROGRAMS NEEDED FOR TEACHERS AND AUXILIARY PERSONNEL
HEALTH AND NUTRITION OF CHILDREN AND PARENTS
VARIETY OF SUPPORTIVE SERVICES FOR FAMILIES
ADDITIONAL FUNDS FOR RESEARCH AND EVALUATION
IMPROVED COORDINATION, CONSOLIDATION, AND COMPATIBILITY OF GOVERNMENT PROGRAMS
INTEGRATE CHILDREN FROM VARIOUS SOCIOECONOMIC BACKGROUNDS IN PROGRAMS
PRIORITY SHOULD GO TO DISADVANTAGED CHILDREN*

*This priority was written into the legislation so was infrequently mentioned.

SOURCE: Based on joint hearings before the Subcommittee on Employment, Manpower, and Poverty and the Subcommittee on Children and Youth of the Committee on Labor and Public Welfare, U.S. Senate, 92nd Congress, First Session on S. 1512, May 13 through June 16, 1971.

FIGURE 2 EXPRESSED CONCERNS OF INVITED WITNESSES TESTIFYING AT THE SENATE HEARINGS ON COMPREHENSIVE CHILD DEVELOPMENT ACT OF 1971

N = 34

Table 10

APPARENT GOALS OF EARLY CHILDHOOD PROGRAMS

Program	No. of hours per day	Primary	Secondary	Tertiary
Head Start	3 to 10 summer/all year	Cognitive development leading to school success	Social and emotional development; physical (nutrition)	Parent involvement as reinforcement of Head Start
Follow Through	schoolday	Cognitive development to build on Head Start gains	Social and emotional development	Physical (nutrition); parent involvement
Kindergarten	2-1/2 to 3 hours	Socialization for school	3-R readiness	
Developmental day care (few in number)	8 to 14 hours	Cognitive development	Social and emotional development	Physical development; safety; nutrition
Custodial day care (most centers and homes)	8 to 14 hours	Protective care; safety	Nutrition	Social development
Nursery schools	2-1/2 to 3 hours	Social and emotional development	Cognitive development	Physical development
Before- and after-school care	4 to 6 hours	Protective care; safety	Social, recreational	Nutrition
Crisis 24-hour care	24 hours	Protective care in absence or disability of caretaker		

Potential Demand

In the Harris poll of 1970, mothers of children under 12 years of age were asked how likely they would be to look for work if a reliable day care center were available. Overall, 20 percent of the respondents were already employed and 24 percent said they would try to look for work (see Table 11). Significantly, 46 percent of black mothers polled and 43 percent of mothers with family incomes under $5,000 per year said they would seek employment. These high proportions may be directly related to the fact that 45 percent of poor white families and 49 percent of poor black families had fathers who worked all year at full-time jobs. Despite their full-time efforts, their earnings were still at the poverty level.

Although some women work to be "self-fulfilled," a far larger proportion (89 percent, as shown earlier in Table 1), work to support themselves or their families or to bring extra money into the family. For example, Keyserling found (p. 11) that in 1970, of the 3.9 million families with children under 6 years in which both parents worked, without the mother's earnings 73 percent would have had to struggle by on less than $10,000:

- 7 percent of the families would have lived in poverty, under $3,000 per year
- 33 percent would have had incomes between $3,000 and $7,000 per year
- 33 percent would have had incomes between $7,000 and $10,000 per year

It is now also clear that the nation's economic growth depends on the labor of women. Department of Labor projections (in Women Workers Today, 1971) indicate that there will be increased opportunities for more mothers to enter the labor market. In 1950, only 22 percent of women were in the labor force; by 1971, 43 percent of women were employed. The higher the woman's educational level, the more likely she is to be employed. In

Table 11

LIKELIHOOD OF WOMEN LOOKING FOR WORK IF RELIABLE DAY CARE CENTERS WERE AVAILABLE*
(Percent)

	Already Work	Would Look for Work	Probably Not Look for Work	Not Sure
Single†	35%	32%	33%	-%
Married	19	22	56	3
Divorced/separated	38	48	9	5
Widowed	20	21	51	8
Cities	22	32	44	2
Suburbs	19	20	57	4
Towns	24	19	54	3
Rural	17	23	57	3
Black	35	46	17	2
White	18	21	58	3
Under 30	17	30	49	4
30-39	20	20	57	3
40-49	26	17	54	3
50 and under	33	20	47	-
Under $5,000	19	43	34	4
$5,000 to $9,999	19	24	54	3
$10,000 to $14,999	20	19	59	2
$15,000 and over	23	14	60	3
Total	20%	24%	53%	3%

* Women with children under 12 years of age.

† Single women have an equally strong need for day care centers as do married, divorced, separated, and widowed women. A significant 14 percent of all single women sampled report they have children under 12 years old. It is not surprising that the black and the poor favor additional day care centers so strongly, particularly those that are subsidized and charge low fees, since these women can least afford to pay for private child care. This group, prevented from working by a shortage of day care centers, could represent a significant addition to the nation's work force.

Source: Louis Harris and Associates, Inc., A Survey of the Attitudes of Women on Their Role in American Society, New York, 1970.

1971, of women with five years of college, 71 percent were employed; of those with four years of college, 56 percent; and of those with four years of high school, 50 percent. However, only 31 percent of those with eight years of schooling and only 23 percent of those with less than eight years were employed. Since younger women are better educated than older women, and the young tend to look with favor upon the employment of women, over time, more mothers are likely to enter the labor market. Further, working women tend to have fewer children and are thus not tied to their homes for as many years as mothers with more children. For these several reasons, more mothers are likely both to require and to demand adequate child care resources.

Costs of Day Care

The Senate Committee on Finance has estimated costs of day care at three levels of quality: (1) custodial, (2) some developmental and custodial, and (3) developmental with comprehensive services. Table 12 presents these cost estimates made in 1967, which have been revised by Keyserling to reflect increases as of December 1971. Estimates of day care center costs ranged from over $1,500 a year for full-day care per child to over $2,800; costs of family day care homes range from over $1,700 to $2,900; and before- and after-school care costs range from over $300 to $800 a year. Very few families can afford the estimated $2,854 for quality day care of one child, and even fewer families can afford such quality care for more than one child. Keyserling estimates only one percent of families can afford such unsubsidized service.

Estimates made for the Congressional legislation now in progress (S.3193 and S.3228) average about $2,000 a year per child for all-day care. For center care, there is an inverse relation between age of child and cost of care; i.e., the younger the child, the higher the staff-child ratio required.

Table 12

ANNUAL COSTS OF CHILD CARE, BY LEVEL OF QUALITY

	Minimum (Custodial)		Acceptable (Some Developmental and Custodial)		Desirable (Comprehensive Program)	
	1967	1971*	1967	1971*	1967	1971*
Full day care in center	$1,245	$1,532	$1,862	$2,292	$2,320	$2,854
Family day care in home (mostly infants under 3)	1,423	1,750	2,032	2,500	2,372	2,918
School Age: before- and after-school and summer	310	381	653	803	653	803

Other cost facts:

(1) Head Start in FY 1970 averaged $1,200 with range $1,000 - $1,600

(2) Personnel cost factor is 75 percent to 80 percent of total costs

(3) Quality child care centers for:

	Cost per Child in 1970-71
25 children	$2,349
50 children	2,223
75 children	2,189

Sources: Committee on Finance, U.S. Senate, Child Care Data and Materials, June 16, 1971
* M.D. Keyserling, Windows on Day Care, National Council of Jewish Women, New York, 1972, pp. 222-223.

Parents and the Federal government are the chief sources of day care center revenue. Most parents pay little or nothing for out-of-home care because they simply cannot afford to. Rowe estimated that fewer than 5 percent of families could pay over $20 a week for child care and only 1 percent would pay over $40 per week (quoted in Schultze, 1972, p. 270).

The major cost of day care is staff--ranging from 75 to 80 percent of the total cost of programs. Since the caliber of staff is crucially important to the appropriate development of young children, and since staff account for about four-fifths of the total cost of programs, very little savings could be effected in the programs. Many middle class families find that lack of availability and increasing costs of quality care are difficult problems to overcome.

Summary

It is evident that a very large increase in a variety of day care resources is needed to meet the current and potential demand. There are neither sufficient nor adequate facilities and far too few trained personnel.

The Westinghouse-Westat study summarizes the existing situation:

> Day care for young children in the United States today is an institution lagging far behind the social change that has brought about the need for it. It is an unorganized, largely unregulated, and unlicensed service, provided in ways that range from excellent to shockingly poor, and yet it is indispensable to a growing number of people in present-day America: the force of working women of child-bearing age. Working mothers represent all socioeconomic levels, and the family with a working mother is becoming the norm rather than the exception. In the absence of organized day care, ad hoc arrangements, which are largely impossible to assess in any accurate way, abound.

Appropriate developmental child care is expensive, and the cost of universally accessible child care may be prohibitive. Therefore, it is important that the needs of child populations at risk be given priority. Surveys of existing child care resources have been limited in scope. However, they indicate that despite some exceptions, available child care services are woefully inadequate in all dimensions--in facilities and physical plant, in quality and training of staff, in standards of services provided, and in attention to the developmental needs of children. The issues that must be dealt with are: what setting is most appropriate for which children (group or center care, or family day care); how much care is needed; and what kind of an "educational" component is needed. Since we know that the child-rearing environment has tremendous impact on a child's development, it is crucial that it be an enhancing rather than an impairing one.

VI THE FEDERAL EFFORT

Historical Overview

Historically in the United States, there has been a cyclic expansion and contraction of publicly funded child care programs in response to the nation's socioeconomic needs, and specifically in relation to conditions affecting the employment of mothers, rather than primarily in response to the needs of children. For example, following the Civil War, tax-supported public kindergartens and day nurseries were established to provide care for the children of war widows seeking employment. During the depression of the 1930s, day care centers were opened under the Federal government's Works Progress Administration primarily to provide employment for unemployed teachers, domestic workers, and others.

During World War II, the labor of women was essential to the war effort. Consequently, the crucial need for day care for children of working mothers became a national problem spanning the socioeconomic classes. In this situation, as in earlier ones, the welfare of children was secondary to the needs of the country and the economy.

Head Start--as one of several interrelated "War on Poverty" programs initiated experimentally in an attempt to break the transgenerational cycle of poverty--departs from this traditional tie to national economic conditions only in part. For it seemed necessary that in order to succeed in its objective to provide a developmental environment that would enhance each child's potential, Head Start had to provide a comprehensive program that addressed the needs of the whole child. (And the Head Start experience has taught us how really complex these needs are.

However, the day care programs related to the Work Incentive Program that trains AFDC mothers (or fathers) for jobs and the proposed Congressional legislation, the Family Assistance Program, to train welfare recipients for jobs, remain in the earlier tradition. It has been only in the past few years, and since Head Start, that there have been public efforts to view the development and welfare of the child as primary and as a national issue in its own right.

The Current Effort

Of the seven Federal agencies now with programs affecting children and families (see Figure 3), the Department of Health, Education, and Welfare, the Office of Economic Opportunity, and the Department of Labor are the major ones. DHEW, through its ten regional offices, fosters and supports a variety of programs encompassing the health, education, and welfare of parents and children. These programs include funding of direct services to parents and children; training of personnel to provide such services; basic and applied research to acquire systematic knowledge on which to base programs; and demonstration and pilot projects to discover the most effective ways to achieve the specific program objectives.

The Office of Economic Opportunity is an independent agency within the Executive branch of the Federal government whose primary goal is the elimination of poverty in our country. Through a variety of innovative and experimental approaches, OEO seeks and tests effective ways to improve the life circumstances of the economically, educationally, and physically disadvantaged members of our society. When programs have been sufficiently developed by OEO, they are then transferred to an appropriate agency for more permanent programming. For example, the Head Start program was transferred from OEO to DHEW in July 1969, when it was felt that Head Start centers had proven their value for child development and should become a regular Federal program.

AGENCY	CHILD CARE PROGRAMS	EDUCATIONAL PROGRAMS FOR DISADVANTAGED, MIGRANT, HANDICAPPED, INDIAN CHILDREN	BASIC AND APPLIED RESEARCH, DEMONSTRATIONS	HEALTH AND FOOD SERVICES FOR CHILDREN AND FAMILIES	TRAINING AND EMPLOYMENT PROGRAMS	DAY CARE FACILITY RENOVATION AND CONSTRUCTION, OR LOANS
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE						
OFFICE OF EDUCATION		▲	▲		▲	
OFFICE OF CHILD DEVELOPMENT	▲		▲†	▲†	▲†	
SOCIAL REHABILITATION SERVICES	▲		▲		▲	
SOCIAL SECURITY ADMINISTRATION	▲					
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION			▲	▲	▲	▲
NATIONAL INSTITUTE OF HEALTH			▲			
OFFICE OF ECONOMIC OPPORTUNITY	▲					
DEPARTMENT OF LABOR	▲		▲		▲	
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	▲				▲	
DEPARTMENT OF INTERIOR		▲				
DEPARTMENT OF AGRICULTURE				▲		
SMALL BUSINESS ADMINISTRATION						▲

*See tables in the appendix for detailed information on specific program and agency, relevant public law, budget, etc.
†From "Office of Child Development: Progress and Accomplishments Report," 1971.
SOURCE: Based on tables in Congressional Record, February 9, 1970, pp. H707-H711.

FIGURE 3 FEDERAL AGENCY PROGRAMS IN OR RELATED TO EARLY CHILDHOOD EDUCATION,* FY 1969

The Department of Labor's programs relevant to child care are primarily concerned with training adults in occupations that will allow them to support themselves and their families. The provision of day care for their children allows parents to participate in these training programs. Therefore, the day care programs are only secondary to the Department's basic mission.

Other Federal agencies with programs related to child care include:

- The Department of Agriculture with its food stamp, school lunch, school milk, and surplus food programs
- The Department of the Interior with its kindergarten programs in special or public schools for reservation Indian children
- The Department of Housing and Urban Development which provides funds for facilities and services, including day care, in blighted neighborhoods or model cities, and
- The Small Business Administration which provides loans to assist small businesses to establish day care programs or to renovate or construct facilities for them, as well as loans to economically disadvantaged persons to start small businesses.

DHEW has a major role in family and day care center programs, which include Head Start, Parent and Child Centers, social services to AFDC families, child welfare services, and day care for the Work Incentive Program. DHEW's Social and Rehabilitation Service administers the federally funded (traditional) day care services, as mandated in Title IV of the Social Security Act. These include the WIN program, and services to AFDC and other needy children, among whom are some children of working mothers (see Appendix p. A5-6). OEO, DOL, and HUD also have day care programs relevant to their missions.

There are now upwards of 55 federal programs (see appendix) in or relevant to early childhood care. Some coordination of these activities

is being attempted, with the primary coordinating and planning task assigned to OCD. These activities include:

(1) The operation of day care or family day care centers under private or public auspices for children of economically disadvantaged families, including children of migrant workers, Indians, and other ethnic or racial minorities and for the mentally, emotionally, and physically handicapped.

(2) Special education programs for economically disadvantaged children, including migrant and handicapped children.

(3) Health and food services for children and their parents.

(4) Basic and applied research into the processes of child development, and demonstration and pilot projects to test methods, approaches, and techniques that will potentiate the developmental processes.

(5) Training and employment programs that provide manpower for day care programs or that require day care services while the parents are in training.

(6) Construction or renovation of day care or related child welfare facilities or loans to small businesses to provide day care services.

Tables A-1 through A-5 in the appendix provide specific information of Federal programs in each of these above areas.

OE and OCD

The Office of Education and the Office of Child Development administer the major Federal programs in early childhood education, including planning and coordination, service, training, and research and demonstration projects. These are specified in Figure 4.

The major Federal early childhood programs are OCD's Head Start and OE's Follow Through. Head Start is both a social action program and a massive social experiment. Follow Through is a relatively small experimental program that advances the Head Start developmental goals into the early elementary grades.

PROGRAM	OCD	OE
PLANNING		
National Center for Child Advocacy	▲	
COORDINATION OF RELEVANT SERVICES: FEDERAL, STATE, LOCAL LEVELS		
Community Coordinated Child Care (4-C)	▲	
SERVICE PROGRAMS		
Head Start: 275,000 Full Year; 118,000 Summer	▲	
Parent-Child Centers	▲	
Health Start	▲	
Home Start	▲	
Follow Through		▲
Early Childhood Education for Handicapped		▲
ESEA Titles I, II, VII		▲
Family Day Care	▲	
TRAINING PROGRAMS		
Junior High School Students Training for Work with Children (Experimental Program with OE Technical Assistance)	▲	
Child Development Associates (Paraprofessional)	▲	
Public Services Careers Program (Trains Disadvantaged)	▲	
Education Professions Development Act (Teachers, Teacher Trainers, Trainers of Teacher Trainers, Administrators, and Teacher Aides)		▲
RESEARCH AND DEMONSTRATION*		
Basic Research		▲
Applied Research	▲	▲
Evaluations	▲	▲

*The Federal Interagency Panel on Early Childhood Research and Development, involving all agencies with major early childhood R&D programs, is the coordinating agency for federal research and development.

FIGURE 4 CURRENT EARLY CHILDHOOD EDUCATION PROGRAMS OF OCD AND OE

With the initiation of Project Head Start in March 1965, the Federal government entered early childhood education in earnest. This was the first time that a Federal day care program of this magnitude was primarily concerned with optimizing the development of children rather than for ancillary purposes. Head Start was viewed as an important part of the War on Poverty. It was felt that intervention with disadvantaged children prior to elementary school entrance might contribute to their success in school and later in life, thus breaking the poverty cycle that plagues suceeding generations. The comprehensive services provided to the children include medical and dental examinations (and treatment where needed), and psychological, social welfare, and nutritional services.

In order to ensure that whatever gains children derived from their Head Start experience are not lost in regular school, the Office of Education and OEO initiated the Follow Through program in 1967, using funds under Title I of the Elementary and Secondary Education Act of 1965. Under Follow Through, a variety of child development techniques and methods are being studied to determine their value and efficacy in developing children's cognition.

Research and Development

A primary role of the Federal government in areas of national concern is to advance knowledge and understanding, with a view toward improving the life chances and quality of life of the American people. No single state or local government has the resources to foster and support research and development programs of the necessary magnitude. Further, increased knowledge in early childhood education is useful to all parts of the nation. Therefore, because R&D efforts have national value and because the Federal government alone has the resources to promote these activities, it is charged with major responsibilities in this area.

Table 13

PARTICIPATING AGENCIES IN THE FEDERAL INTERAGENCY PANEL ON EARLY CHILDHOOD RESEARCH AND DEVELOPMENT

Department of Health, Education and Welfare

- Office of Child Development (OCD)
- National Institute of Child Health and Human Development (NICHD)
- National Institute of Mental Health (NIMH)
- National Institute of Neurological Diseases and Stroke (NINDS)
- Maternal and Child Health Service (MCHS)
- Community Services Administration (CSA - SRS)
- National Institute of Education (NIE)
- Office of Education (OE)
  - Bureau of Education for the Handicapped (BEH)
  - Bureau of Elementary and Secondary Education, Follow Through Program (BESE)
  - National Center for the Improvement of Educational Systems (NCIES)
- Office of the Assistant Secretary for Planning and Evaluation (OASPE)

Office of Economic Opportunity (OEO)

As we have noted, a number of agencies have R&D programs in early childhood education. To coordinate these activities, the Federal Interagency panel on Early Childhood Research and Development was formed consisting of the agencies listed in Table 13. This interagency panel was convened by OCD in the Spring of 1970, and included agencies with major R&D programs in early childhood. In 1971, the panel published a report by M. S. Stearns, et al., Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood and Recommendations for the Future, which specifies the areas of ongoing research, identifies gaps in knowledge and understanding, and recommends further R&D activities.

Community Coordinated Child Care (the 4-C Program)

The rapid growth in the number of agencies and programs that had been legislated to provide child care resources led to a desire for coordination of the activities, first at the Federal level and then at the state and local levels. A Congressional directive was issued (Sec. 522d of the OEO Act of 1967) to the Secretary of DHEW and to the Director of OEO, to develop mechanisms for such coordination at the Federal level and to promote it at the state and local levels. As a result, a Federal Panel on Early Childhood was formed of representatives of those agencies having programs related to child care and of those having interest in such programs, e.g., Office of Management and Budget. The Federal Panel then established the Community Coordinated Child Care Standing Committee to formulate policy for development of coordinated programs in states and local communities. The aim of 4-C is to bring together all the private and public resources in a community that provide services to families and children so as to avoid overlap in services and to obtain maximum benefit from limited funds, staff, and facilities. Although Federal funds are available for but a small number of pilot 4-C projects around the country,

at least 300 communities have found the coordination concept of sufficient value to initiate efforts to bring their resources together so that better services may be provided for their children and families.

The Federal Panel has published the Federal Interagency Day Care Requirements, which established minimum standards for federally funded day care programs. These standards are currently being revised. Their importance lies in the fact that they influence state and local child care licensing standards and regulations as well.

Despite the seemingly large Federal efforts in early childhood education, which reach into most towns and cities of the nation, greatly enlarged programs are being demanded to meet the needs of children and families not yet affected.

VII THE RESEARCH EVIDENCE

Overview

Public policy decisions are essentially political by nature; that is, they are responsive to strong pressures to act or not to act on certain issues. Research evidence can provide a powerful rationale to undergird decision-making because it is more objective than the pressures of stakeholder groups.

Publicly funded basic and applied research has almost invariably been supported in order to achieve specific national objectives. The oldest such research efforts were concerned with food production and with improving technology for national defense.

More recently, two major Federal research institutions were established to advance knowledge in the sciences and in the life sciences. The National Science Foundation was established in 1950 to replenish the knowledge "used up" in World War II by supporting basic research in the sciences. Until recently, NSF focused almost exclusively on the "hard" sciences. The National Institutes of Health are charged with advancing the nation's health through support of the life sciences.

At this writing, the National Institute of Education has been legislated to advance knowledge that will aid in achieving national educational objectives. A primary purpose is to achieve greater effectiveness in promoting equality of educational opportunity.

Educational research is very recent, particularly in areas relevant to the field of early childhood. Even in child health--which we tend to think of as a very old national concern--it was only at the turn of

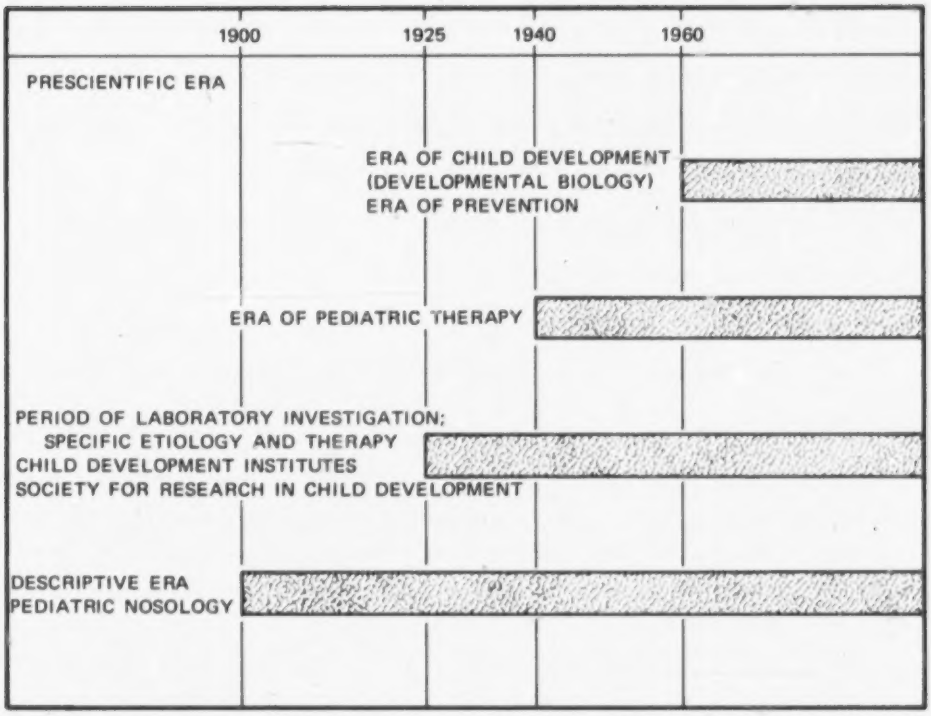
the century that "prescientific" approaches were abandoned and it was only in 1925 that laboratory science in pediatrics began in earnest. Preventive pediatrics is just over a decade old (see Figure 5).

Research of relevance to issues in early childhood education can be differentiated as follows:

- Research on components or dimensions of developmental processes or behavior--which is generally reductionist in nature and provides the bases for more complex or synthetic research (such as programmatic research).
- Programmatic or ecological research--research on program elements as they affect behavior and/or outcome.
- Evaluation or surveys of large social action programs--such as the "Coleman Report" and the Head Start and Follow Through evaluations.

By nature, educational research is multidisciplinary, drawing upon the perspectives and approaches of a variety of disciplines to illuminate an educational issue. This is just as true of research in early childhood education.

Programmatic research in early childhood education is recent indeed, most of it dating from the mid-1960s, when it burgeoned under the impetus of Head Start. And this type of effort, to assess systematically the effects of specific program elements--curriculum, teacher-child interactions, and other program variables--on the child's developmental domains is still limited primarily to the economically disadvantaged population served by programs such as Head Start. Such systematic studies have not been mounted to determine program effects on economically advantaged children, nor have all subcultural populations (Indian, migrants, Puerto Ricans, Orientals, etc.) been included in these studies.



SOURCE: J. B. Richmond. "Child Development: A Basic Science for Pediatrics," Pediatrics, Vol. 39, May 1967.

FIGURE 5 PERIODS IN THE HISTORICAL DEVELOPMENT OF PEDIATRICS

The State-of-the-Art

We have had only a relatively short time to achieve knowledge in the field of child development and in the complex field of early childhood education. The state-of-the-art is not sufficiently advanced to make us sanguine about our progress. However, there is a good deal of on-going effort to advance understanding.

There is ferment within the relevant research communities. Past assumptions, myths, and perceptions are being reexamined. New hypotheses are being generated, questions are being raised, changes in direction and approaches are being implemented. Some of these will be mentioned in a later part of this section. The ferment bodes well for the future, but it reveals the fact that it is clearly too soon to reach definitive conclusions about the kinds of program that will optimize children's development. There are serious limitations to the research effort, among which are the following:

- Not enough time has elapsed for long term follow-up studies of early childhood educational intervention programs that began in the 1960s. Further, it has been very difficult to find "untreated" comparison groups against whom to evaluate the progress of the intervention groups.
- Among the most pressing requirements are the determination of appropriate research questions, the development of theory based on data, and the development of improved study designs and instrumentation, particularly in areas other than the cognitive.
- We need better information about normative development and about the underlying mechanisms of developmental processes. Causal relationships have not been established in crucial areas of relevance. Yet these kinds of basic understandings are needed to undergird the development of appropriate programs (see White et al., 1969, Perspectives on Human Deprivation, 1968; La Crosse et al., 1968; Stearns 1971a).
- Evaluations generally are retrospective or concurrent rather than preplanned and appropriately controlled. Indeed, they

may not be controllable under conditions of actual program operations (see Timpane, 1971; Cohen, 1970; and Mosteller and Moynihan, 1972).

- We lack information on the effects of the early years upon future educability (White et al., 1969, p. 7). We also lack longitudinal data that would specify the relationships between child attributes and adult functioning.
- Consensus is lacking on appropriate specific early childhood education objectives which might provide a basis for research efforts toward their realization.

Table 14 illustrates many of the relevant variables in program and ecological research* and (in a footnote) indicates the traditional disciplinary boundaries that must be crossed.

Assessment Instruments

Dissatisfaction with the traditional measuring devices, such as IQ and achievement tests, has increased concurrently with changing views on their appropriate purposes. At the turn of the century, when Simon and Binet began what has burgeoned into a tremendous psychometric enterprise, their main purpose was to determine which of their middle and upper class French students were likely to succeed in their academic pursuits and which were likely to fail. The use of such tests for prediction and selection--to select out those likely to fail and select in those expected to succeed--has continued to this day. Their use has broadened from the academic sphere to business and industry, and other aspects of life.

---

* Urie Bronfenbrenner (1972) has just released an excellent paper in which he suggests a new model for ecological research, entitled "A Theoretical Prospective for Research on Human Development."

Table 14

ILLUSTRATIVE SCHEMA FOR PSYCHOSOCIAL DEPRIVATION AND DEVELOPMENT*

Environment Attributes		C	Behavior Attributes†	
A	B	Person	D	E
Distal	Proximal	Attributes	Proximal	Distal
Race	Social evaluation reactions	Skills	Reading deficiency	School failure
Social class	Parental teaching modes	Beliefs	Aggressiveness	Delinquency
Ethnic status	Affectional climate	Motives	Withdrawal-isolation	Psychopathology
Institutional structures	Discipline-control practices	Attitudes	Discrimination	Inter-group hostility
Biological defect	Exposure to peer models	Interests	Striving	Successful role performance
Urban ecology	Teacher's expectations	Identities	.	.
.	.	.	.	.
.	.	.	.	.

* The items within each column are arbitrarily arranged. Further, there is no intention to suggest point-for-point relations across rows. Each column, in short, is a "box of variables," relations among and between which must be empirically established.

† Proximal behavior is described in psychological terms while distal behavior implies social or institutional description, social processing, or social categorization.

‡ Sociologists typically are interested in relationships among variables in columns A and E, social and developmental psychologists in column B with columns C or D or E. Personality and clinical psychologists focus on relations within column C and between column C and D and E.

Source: R. Jessor and S. Richardson, "Psychosocial Deprivation and Personality Development," in Perspectives on Human Deprivation: Biological, Psychological, and Sociological, USGPO, Washington, D.C., 1968.

As people have become aware of the potency of tests in determining school (tracking) and life (employment) opportunities, they have attacked the tests increasingly. Questions have been raised as to their validity as measurements of the capabilities of people of diverse cultural backgrounds and styles. Questions are also being raised (including several court cases) about their use as screening devices for employment when the relevance of the test content to the requirements of the job cannot be demonstrated.

Another issue has arisen: a significant proportion of OE appropriations--well over 50 percent--over the past few years--has been devoted to "equality of educational opportunity," the avowed purpose of which is to "select in" all children, i.e., to be inclusive rather than exclusive. As a result, a key objective of the schools has become not the identification and elimination of failures but rather the modification of the learning environment to enhance success for all students. Although there is recognition that there is diversity in the aptitudes and capacities of children that is expressed in diverse learning styles and modes, it is felt that the schools should develop each child's "potential." Although the means to its realization have yet to be developed, this objective is evidence of a value change of far-reaching proportions--with potential reverberations throughout the society. Clearly, our instrumentation, particularly in the non-cognitive dimensions, is grossly inadequate to meet the needs of such a redirected research effort. This problem is part of the current research dilemma with which members of the relevant research communities are attempting to grapple.

However, limitations are a natural part of the research environment. They have not deterred the goodly number of investigators who have risen to the challenge of attempting to discover ways that may better the life circumstances of all members of the society. Below are described the more recent efforts.

Research-based Rationale for Early Childhood Education*

Shortly after Sputnik made us aware that the development of our human resources was vital to our national security and when, upon closer examination, we discovered that a large segment of our population lacked the means to develop as optimally functioning human beings, research findings seemed to indicate that it was possible to supply the missing nutrients if we began sufficiently early in the child's life span. Thus, programs such as Head Start got under way.

The salient theoretical considerations that underlie this type of early childhood intervention programs include belief in (1) the modifiability and flexibility of human intelligence and human functioning; (2) the significance of the early years of life in a child's development, which may or may not involve "critical periods";† and (3) the singular importance of environmental quality in determining the child's affective

---

* Much of this section is taken from the writer's chapter in Stanford Research Institute's report, Implementation of Planned Variation in Head Start, 1971, pp. 1-37.

† A "critical period" refers to the hypothesis that if an organism has not had certain stimuli or experiences by a particular time, certain responses will be absent from its repertoire.

and learning modes. However, the dominant view regarding human intelligence that prevailed until very recent times was that it was genetically determined and fixed and that, through a natural process of maturation, it would achieve its predetermined level. But there were early skeptics who tested this view. Among these, the work in the 1930s of the Iowa Child Welfare group (which included Skeels, 1958, and Skodak, 1958), and the study by Dawe (1942), as well as the later work of Kirk (1958) and Strodtbeck (1958) are notable examples.

The Skeels study in 1939 and its follow-up in 1966 provide dramatic evidence that the environment has a significant effect on a child's intellectual development and his competence. Both Hunt (1961) and Bloom (1964) became convinced that environment plays an important role in early development. Hunt (1967) inferred from the accumulating evidence from both animal and human studies that the development of intelligence is based on the interaction between a person's genetic potential and the nature and quality of his experiences. He mentions these studies among others: (1) the work of Johannsen (in 1909) who distinguished between the genotype and phenotype, and described the phenotype as a product of genetic endowment and circumstances experienced; (2) animal studies which have revealed that the structural and chemical development of the brain and the animal's learning ability both seem to be affected by the quality of the early environment; (3) human infant studies showing that such behaviors as eye-hand coordination and blink-response may appear earlier as a result of a more stimulating environment; (4) the concept of the hierarchical nature of intelligence, based on the quite different approaches of Piaget (1936) in early child development, of Gagné (1966) in adult problem-solving, and of Ferguson (1954, 1956) and Humphreys (1959, 1962) in factor analysis; and (5) the cross-cultural studies of Wayne Dennis (1966) in 50 settings around the world that seem to demonstrate that life circumstances have a highly significant impact on tested intelligence.

Bloom concluded that the rate of intellectual development is greatest in the early years of life and reaches relative stability by age 12, and that it can be modified most easily during the period of its most rapid growth. This is consistent with Hunt's earlier observation that the longer a person lives in a given set of circumstances, the harder it is to change their influence either on his developing anatomy or on his behavior.

Hebb and Freud also felt that the early period of life is crucial. Hebb (1949) advanced the theory that there are two stages of learning: in the first stage, the quantity and quality of an organism's early perceptual experiences will determine the amount that is stored in a neurological bank; then, in turn, the second learning stage will depend on the quantity and quality of the bank account for its efficiency and the level of its functioning. Thus, Hebb's theory and Freud's work on affective development, as well as the evidence from studies of different child-rearing patterns between middle-class and lower-class families, suggest that the quantity and quality of the child's experiences may affect his learning style and behavior in an educational setting and in other settings.

These theories seemed to shed some light on the fact that, although children from economically impoverished backgrounds may be able to function with some competence within their immediate milieu, when they enter school they are not as well equipped in cognitive, verbal, linguistic, perceptual, and attentional skills as their middle-class peers. Also, they seem to require a stronger self-concept and motivation for learning. To gain understanding of the apparent divergence between middle-class and lower-class children, a number of investigators have conducted comparative studies of child-rearing patterns between classes and among racial and ethnic groups. These include studies of English families by Bernstein (1960, 1961); of Israelis by Smilanski (1961, 1964); of blacks by

Davis (1948 and with Havighurst, 1946) and by Hess and Shipman (1965, 1969); and of Puerto Ricans by Lewis (1966). Regardless of the cultural variations, these investigators have found distinct differences in child-rearing patterns between the socioeconomic classes. The implication seemed to be that if disadvantaged children could have early experiences that were similar to middle-class children's early experiences, they too would succeed in school. Thus, these various conclusions seemed to support the idea that early education may prevent or ameliorate many of the conditions that appear to hamper the competence of disadvantaged children. On the basis of these theoretical considerations and of the results of early intervention studies (e.g., Dawe, 1942; Kirk, 1958; Strodtbeck, 1963) additional studies, using various curricula orientations, were conducted from the late 1950s through the decade of the 1960s to determine the effect on children of early education (e.g., Darcee, 1962; Weikert, 1967; Deutsch, 1962; Bereiter-Englemann, 1966; Sprigle et al, 1967; Karnes, 1969; Miller, 1970; DiLorenzo, 1969). Also, as mentioned earlier, Head Start programs were launched beginning in 1965 to optimize the development of economically disadvantaged preschool children and thereby improve their chances of success in school--and ultimately in life. Table 15 presents the results of some of these more recent programs.

A quick review of the "Program Effects" column in Table 15 and the "Immediate Impact--IQ" column in Table 16 provides a rather clear picture of the available results on these selected programs. In almost every case, and rather dramatically in some of them (e.g., Weikart), there is improvement of the experimental groups over the contrast groups. In some cases, the latter have also improved (Weikart Wave O, Karnes et al.) but other contrast groups have lost ground (Strodtbeck, Deutsch, DARCEE). The "Achievement and/or Other Gains" column of Table 16 also indicates improvements (Head Start, DARCEE, Weikart, Sprigle, Bereiter-Englemann).

Table 15

SELECTED RECENT RESEARCH PROGRAMS IN EARLY CHILDHOOD EDUCATION

Investigator or Program	Study Group	Programmatic Focus	Program Effects: Experimental Group IQ	Program Effects: Contrast Group IQ
Skeels: 1939, 1960	Mentally retarded infants	Radical and sustained intervention	102 (after 2 years)	66 (after 2 years)
Dawe: 1942	Twenty-three orphanage children	Fifty hours language tutoring and excursions	80.6 to 94.8*	81.5 to 79.5
Kirk: 1958 Community group	Mentally retarded	Language intervention	72.5 to 83.7	75.8 to 75.2
Institutionalized group			61.0 to 73.0	57.1 to 49.9
Strodbeck: 1958	Low income children†	13-week Reading Readiness		
		Structured curriculum	94.2†	89.0†
		Permissive curriculum	86.0†	85.0†
Deutsch: 1962	Low income	Enrichment nursery (innovations)	98.9 to 103.9*	99.0 to 92.0
Darcee: 1962	Low income	Enrichment-parent education	88.5 to 95.5*	86.7 to 81.7
Weikart:				
Wave 0: 1962-63	Low income and mentally retarded	Cognitive (Piaget)	78.4 to 91.1*	75.0 to 82.2
Wave I: 1962-63			79.1 to 90.6*	78.3 to 77.8
Wave II: 1963-64			80.5 to 100.9*	79.4 to 82.9
Wave III: 1964-65			79.6 to 94.4*	81.0 to 81.2
Head Start: 1965 on	Largely low income			
Summer		Began as enrichment nursery	Improved but below norms	
Full year		Multiple approaches	Improved but below norms in most cases	
Bereiter-Englemann: 1964	Low income	Prescripted language development	Low 90s to over 100	No control group
Risley: 1966	Low income	Behavior modification	Improved	No data
Sprigle: 1965	Low income and lower middle income	Learning to learn	104 to 112	Traditional group 90 to 107 No preschool 83
Educational Development Center	Low income	Discovery	Data unavailable	
Bank Street School	Low income	Discovery	Data unavailable	
Karnes, Teska, Hodgins	Low income	Psycholinguistic	96.0 to 110.3	94.5 to 102.6

* Observed differences between groups is significant.
† Children tested three months before preschool as own controls.

Source: Stanford Research Institute, Implementation of Planned Variation in Head Start, March 1971.

Table 16

IMMEDIATE IMPACT AND LONG-TERM EFFECTS OF SELECTED EARLY CHILDHOOD PROGRAMS, BY PROGRAMMATIC FOCUS

Program Focus (investigator or program title)	Immediate Impact		Long-Term Impact	
	IQ	Achievement and-or Other Gains	IQ	Achievement and/or Other Gains
Head Start (Deutsch-type) programs:				
Summer	Improved* (below norm)	Improved	Most faded	Improved†
Full year	Average*		Most faded	
General Enrichment (Deutsch)				
(Deutsch)	Average*	n.a	n.a.	n.a.
(DARCEE)	Average*	Average	Seven years later. Significant difference between groups*	Some faded‡
Cognitive (Weikart: Waves 0, I, II, III, IV)	Average*	Significant improvement	Average (Waves II, III)*	Maintained gains (Wave 0)
Diagnostic (Hodges, McCandless, Spiker)	Average*		Average	
Ameliorative (Karnes)	Average*		No significant difference	
Learning-to-Learn (Sprigle)	Above average	Generally above average	Above average‡	Significant difference‡
Language (Bereiter-Englemann) 1964	Above average*	Above average*	No data	No data
Behavior Modification (Risley)	Improved	Significant improvement‡	n.a.	n.a.

n.a. = not available.

* Difference between experimental and contrast groups is significant.

† Source: Weikart (1967); Grotberg (1969).

‡ Information received from telephone conversation with investigator.

Source: Implementation of Planned Variation in Head Start, Stanford Research Institute, March 1971.

Thus, the immediate impact of the programs lives up to the hopes of the many dedicated people involved, both participants and researchers.

However, it is also clear that over time, these early gains are not maintained in most of the studies that have retested their groups at a later time. This has not been invariably true, but for many of the Head Start programs, the IQ gain is not sustained after school entrance. By the end of the first year of school, the non-Head Start children equal Head Start children (Datta, 1969). However, it must be remembered that these retests have not been very much later; i.e., insufficient time has elapsed for true longitudinal results.

Stearns (1971a) corroborates these findings. She reviewed hundreds of studies to determine whether they provide justification for continued support of Head Start, Title I, and Title III (ESEA) prekindergartens, state-wide early childhood education programs or other publicly funded preschool programs. She states that evaluations showed improvement in intellectual behavior over the short run. She notes that although disadvantaged children who attended preschools typically do not achieve standardized test norms or the levels of middle-class comparison groups on intellectual ability, their scores are superior to those of disadvantaged children who do not attend preschools. However, these gains were generally not stable. Stearns reports:

> The principal finding regarding the longer-range effects of preschool programs on children is that after several years in regular public school there are no significant differences in the academic achievement (or intelligence) of disadvantaged children who have and have not had a special preschool experience. . . . The very few exceptions to this finding may be due to (1) exceptional preschool programs, (2) school programs which followed the preschool experience and were suitable for building on the gains the children had made, and (3) home environments . . . which changed enough to reinforce gains made by the children in the preschool program and to encourage

> their academic achievement. . . . Critical review of the findings would not lead to optimism about our ability to change any one of these three factors (home, preschool or school) sufficiently to guarantee "normal" rates of achievement in young disadvantaged children, but there is some evidence that if it were feasible to change them simultaneously, chances of children's sustained success would increase. (pp. 166-167)*

Social and emotional effects of the preschool programs were difficult to ascertain because of the lack not only of reliable measuring instruments but also "of consensus about what constitutes positive change." Other effects on such items as the children's nutritional status, health, etc., were difficult to determine due to the paucity of such evaluations, although some benefits are assumed. (Stearns, 1971a.)

Relevant Research Hypotheses and Views

There are a variety of research efforts and results which bear on early childhood education issues. They range from the effects of physical growth and development and nutritional status to emotional or motivational development on the child's competence. Some of these will reflect the ferment in the research community and reveal a swing on the part of some investigators from a largely cognitive-language orientation to a "whole child" approach. Others question the value of early childhood programs on various grounds.

---

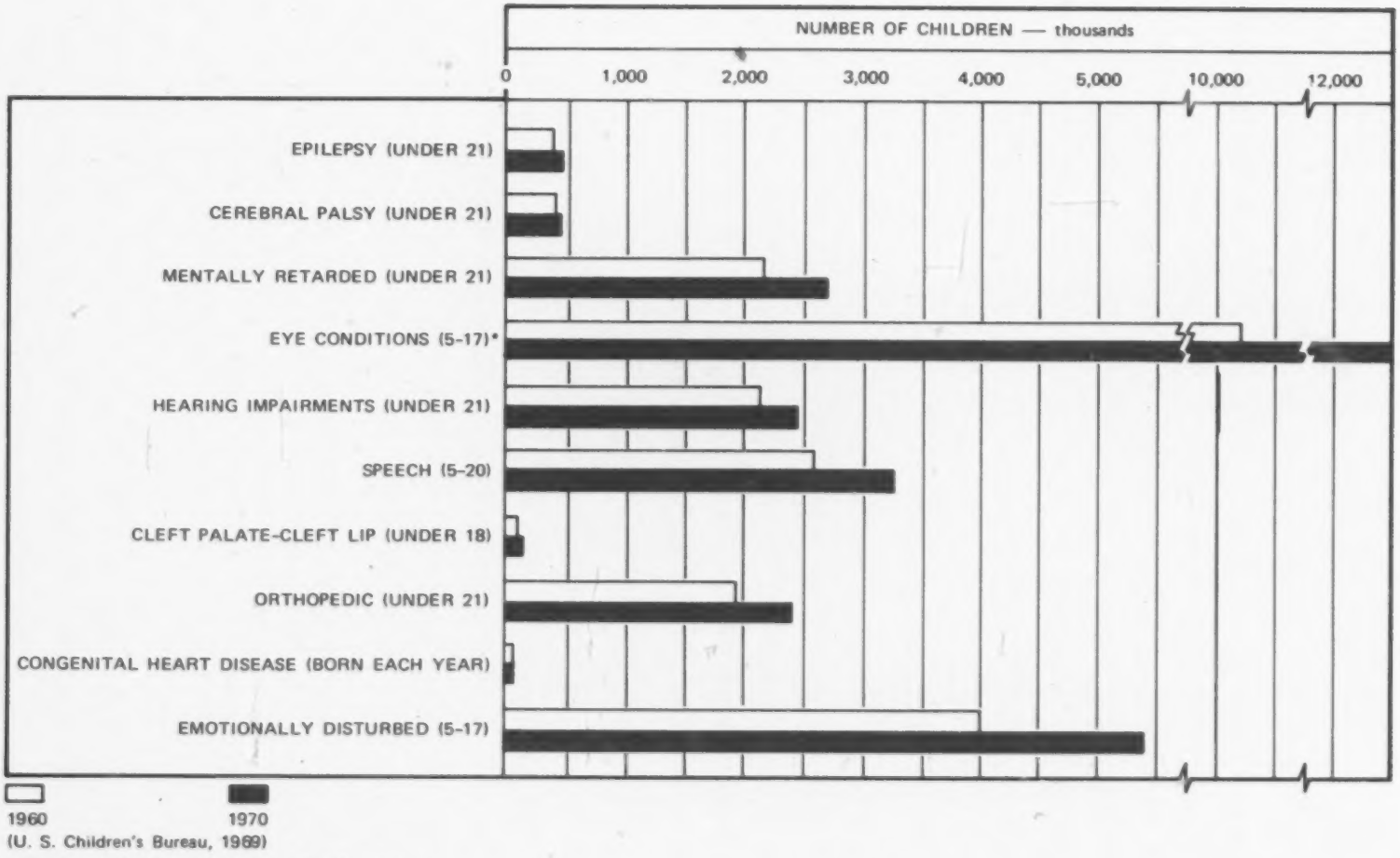
* According to special reports from seven longitudinal studies, some benefits persist as long as the children have been followed. While the magnitude of these benefits are not great enough for complacency, the consistency with which some are found in every study may indicate a rather remarkable persistence of preschool effects. Dr. Sally Ryan (ed.), report in press, Office of Child Development, p. 167.

Biological Factors

Richmond and Weinberger (1970) have implicated trauma during the perinatal period and nutritional and other physiological and health factors as critical to the young child's development and learning capacity. They quote (p.33) Dr. Charles Lowe's testimony before the Senate Select Committee on Nutrition and Related Human Needs:

> The earlier malnutrition exists, the more devastatingly it impinges on growth and development. We now have unambiguous evidence from several sources of the following facts:
>
> • When a fetus receives inadequate nutrition in utero, the infant is born small, the placenta of his mother contains fewer cells than normal to nourish him and his growth will be compromised;
>
> • When an infant undergoes nutritional deprivation during the first months of life, his brain fails to synthesize protein and cells at normal rates and consequently suffers a decrease as great as twenty percent in the cell number;
>
> • During the last trimester of pregnancy, protein synthesis by the brain is proceeding at a very rapid rate. Immediately upon delivery, this rapid rate decreases, although it still continues at a greater pace than at later times of life. In animals, this sharp decrease in protein synthesis immediately after birth occurs in both full term and premature animals. The decrease in protein synthesis occurring in premature animals in all probability also occurs in premature human infants. If we can extend animal observations to the human situation, we have a logical explanation for one of the most distressing concomitants of prematurity; as many as fifty percent of prematurely born infants grow to maturity with an intellectual competence significantly below that which would be expected when compared with siblings and even with age peers.
>
> • Severe malnutrition suffered during childhood affects learning ability, body growth, rate of maturation, ultimate size and if prolonged, productivity.

Richmond and Weinberger are also concerned about providing an ecology for children that is safe and helps to prevent handicapping conditions.



(U. S. Children's Bureau, 1969)

*Needing specialist care including refractive errors.

SOURCE: J. B. Richmond and H. L. Weinberger, Program Implications of New Knowledge Regarding the Physical, Intellectual, and Emotional Growth and Development and the Unmet Needs of Children and Youth. American Journal of Public Health, Part II, Vol. 60:4, April 1970 (suppl.).

FIGURE 6 ESTIMATED NUMBER OF CHILDREN WITH HANDICAPPING CONDITIONS

Figure 6 presents the estimated number of children with various handicapping conditions, and indicates an increase in this number over the decade from 1960 to 1970. They also implicate the perinatal period--post-conception to birth--as being a time when maternal nutrition, stress and insults or trauma produced by diseases, accidents, etc., are critical factors in determining whether the newborn is handicapped at birth. For the developing child, they call for an environment that meets his physical, social, and psychological needs so that he may function with competence in school and adulthood.

Cognitive Versus Total Development

Since the most reliable measures we have are cognitive, (and, as noted earlier, these are under attack) the evaluations mentioned earlier are based on such measures. However, serious questions are raised as to the utility of relying on cognitive measures alone when affective and other variables appear to play a critical role in the children's cognitive or intellectual development.

According to McLure and Pence (1970), Piaget and Inhelder emphasize that four factors help to explain a child's intellectual development: organic growth, exercise and experience with physical objects, social interaction, and internal motivation. They quote from the monograph, The Psychology of the Child, by Piaget and Inhelder as follows:

> It may even seem that affective, dynamic factors provide the key to all mental development and that in the last analysis it is the need to grow, to assert oneself, to love, and to be admired that constitutes the motive force of intelligence, as well as of behavior in its totality and in its increasing complexity.

Zigler (1970) also mentions the well-documented finding that children who do not receive enough attention and affection from the significant adults in their life suffer in later years from a high need for such

affection and attention. Their motivational system is directed toward attainment of such affection and attention rather than toward performance on the cognitive tasks they may be faced with. Clearly, the intellectual competence of an individual is dependent upon the interactive relationships among such variables as cognition, motivation, and emotional state.

IQ and Competence

Zigler (1970), while according the theoretical positions of Hunt, Bruner, White, and others their just due, asserts that interpretations by others of their work has led to the development of an "environmental mystique." This mystique assumes that the child's intellect is trainable and that intelligence is thus a product of the environment. Zigler denies this viewpoint and indicates that, as yet, we do not know the nature of cognitive or intellectual development. He adds that children learn because "learning is an inherent feature of being a human being" (p. 407) and that if a child is not learning, we should attempt to discover the reason. Referring to a recent study he conducted with Butterfield on the nature of IQ changes in deprived children, Zigler indicates that the 10-point change they found was due to improved motivation rather than to improved intelligence. He refers to the findings of numerous studies that indicate no relationship between IQ and ability to function in our society for children with IQs ranging from 40 to 80. He also indicates that even for children with normal intelligence, IQ accounts for only about 25 percent of the variation in achievement. Thus, Zigler concludes that a disadvantaged child's competence is affected as strongly by the child's history of deprivation or failure, his motivation for affection and attention, his views of himself, his interactive capacity with adults, and his expectancy of success as it is by his formal cognition.

Cohen (1967) also mentions gross discrepancies between IQ and achievement among students. She states that many students who are in the middle-range on IQ measures are among the top achievers, whereas many genius students are mediocre in their school achievement. Kohlberg and Mayer (1971) raise the question as to whether gains in measured IQ during preschool predict to "important valued behavior in later life, behavior that may be socioemotional and not intellectual at all" (p. 2; the emphasis is ours).

Heber's Experiment

In their study of the cognitive environment of preschool children, Hess and Shipman (1968, 1969) identified the mother's behavior in relation to the child as a critical factor in his early intellectual development and learning style. Heber and Garber (1971) noted that about 80 percent of the mentally retarded in the nation reveal no identifiable gross pathology of the central nervous system as a causal factor, and that these same mentally retarded are generally located in economically distressed urban and rural areas. However, they also noted that despite the high prevalence of mental retardation among the poor, most poor children are not mentally retarded.

Heber and Garber's surveys of the lowest income level district of Milwaukee revealed that maternal intelligence is the best single predictor of the level and character of their offspring's intellectual development. Mothers with IQs below 80 comprised fewer than half the mothers surveyed, but almost 80 percent of their children had IQs below 80. Further evaluation of the fathers revealed a "striking congruence of maternal and paternal IQ" (p. 2). Thus, Heber and Garber concluded that the prevalence of mental retardation in the slums of America is not randomly distributed, but is concentrated within families identifiable on the basis of maternal

intelligence. Further, they found that these families have a higher birth rate than slum-residing families with average IQs--thereby apparently producing more "mentally retarded" children.

They proceeded to test their hypothesis that the mentally retarded slum-dwelling mother creates a social environment that is distinctly different from the slum-dwelling mother of normal intelligence. They identified 40 mothers of below 70 IQ with newborns. Assigning the 40 babies to experimental or control groups on a random basis, they initiated their intervention shortly after the babies' birth. Both mothers and babies are involved in the program--with mothers receiving training in home-making and baby care as well as occupational training and the baby receiving each day, all day, a "customized, precisely structured program of stimulation." Heber and Garber found a 33 point IQ difference by 42 months of age between the experimental and control groups, with the IQs of the experimentals at above 125 and that of the controls below 95. Heber and Garber are aware that there are pitfalls in interpreting these dramatic results and they await the results of the children's performance in regular school. They conclude:

> Nevertheless, the performance of our experimental children, today, is such that it is difficult to conceive of their ever being comparable to the "lagging" control group. We have seen a capacity for learning on the part of extremely young children surpassing anything which previously I would have believed possible. The trend of our present data does engender the hope that it may prove to be possible to prevent the kind of mental retardation which occurs in children reared by parents who are both poor and of limited ability. (p. 19)

The Time Factor

Rohwer (1971) raises the issue of the appropriate age for teaching children. His research findings lead him to question the efficacy of an educational component in early childhood programs. He concludes that,

in the Piagetian developmental sense, it is inefficient and perhaps unwise to attempt to teach certain intellectual skills in early childhood which can be readily learned in later childhood or even adolescence. Based on his work, he also questions whether children are ready to learn the traditional skills, especially reading, much before age 9 or 10. Stating that we know very little about intellectual development in later childhood or adolescence, he feels that the "prime time for education" is more likely to be the later years rather than the early period. Although he states that this hypothesis requires extensive research before definitive conclusions can be reached, the "timing of education" is accepted as an important issue.

Plasticity of Intellectual Development

Rohwer (1971) reports Elkind's hypothesis that "the longer we delay formal instruction, up to certain limits, the greater the period of plasticity and the higher the ultimate level of achievement." (p. 336) Rohwer adds that there is at least as much evidence and theory that supports this hypothesis as there is that supports early schooling.

Universal Early Schooling

Moore, Moon, and Moore (1972) have raised serious questions regarding the appropriateness of reducing the school entrance age to four years. Reacting to the recommendation of the California Task Force on Early Childhood Education to reduce the school entrance age to 4 years, they cite findings from many studies that range from the neurophysiological through the visual to the psychological and conclude that a universally available reduced school entrance age is not appropriate for young children. They feel that early schooling may be damaging rather than optimizing for young children.

Family Versus Institutional Care

Prescott and Jones (1967) made an observational study of differences between "good" home environment and well run day care centers. Their findings are summarized in Table 17. Essentially they found that, in general, the home provided a more flexible, stimulating environment in which the child received more personal attention and an opportunity to express his individuality. The centers afforded a chance for the child to help himself more than in the home and to interact with his peers and other adults. As a result, they feel that a "good" home supplemented by a short-day permissive nursery school experience would provide the optimal situation for the young child. In the case of young children needing out-of-home care, they feel that good family day care homes have many of the advantages of the child's own home and are preferable for very young children, especially for infants.

Family-Centered Approaches

Schaeffer (September and October, 1971) has reviewed early childhood research on disadvantaged children and concluded that family-centered education is more likely to produce lasting results than institution-centered early education. Based on his own research in addition to findings of Gray, Levenstein, and Gordon, British and Dutch investigations, and others, he finds that parent training programs are not only effective in terms of the child in question, but they also diffuse vertically to other siblings and horizontally within the neighborhood of the target family. He also indicates that concurrent training programs for the target child and his parents are more effective than either program alone. This corroborates Stearn's finding that changes in the home concurrent with a good preschool program (followed by an articulated good early elementary school program) were effective in producing positive changes. (Also see Lazar & Chapman, 1972.)

Table 17

OBSERVED POSITIVE AND NEGATIVE DIFFERENCES BETWEEN HOME
AND THE DAY CARE ENVIRONMENTS IN FACTORS THAT INFLUENCE CHILD DEVELOPMENT

Observed Dimension	Home Environment	Child Care Environment
Expression/Control of emotion	Strong emotion is expressed, but may not always be approved.	Absence of strong feelings and of activities that evoke them.
Nurturance/Promotion of independence	Cared for by one person. More access to personal attention. Mother may be reluctant to let child do things for himself.	Little nurturance and personal attention. Cared for by series of adults. Offers healthy chance for self-help.
Individuality/Group membership	Self-knowledge fostered through access to adult who answers questions. Responds with warmth and concern to child's attempts to comprehend world and give it form through language. Child knows he's important. Child rarely develops sense of group membership except in large families.	Individual attention limited, sometimes nonexistent Reduces sense of importance. Limits fostering sense of self-identity. Adults not able to pay attention to each child's unique development. Offers opportunity to master social skills.

Table 17 (Continued)

Observed Dimension	Home Environment	Child Care Environment
Relationships with wide age range/ Same age of children.	In large families or neighborhoods with wide age range, learning comes from other children of varying ages.	If 2 or 3 hours per day with children of same age, can test self and interact with children like himself.
	May be less opportunity to interact with peers.	If long hours with peers, restricts learning in other settings and with other ages.
Relationships with adults/Children	Child observes adults in a variety of roles in home and in neighborhood.	Gains confidence and skill in learning to relate to adults and children outside of family.
		Observes adults in limited role.
Little/Much adult supervision	Freedom to be on own, to invent own activities.	Child closely controlled and supervised, freedom may be severely limited.
	Gains a keener sense of who he is by making own choices.	Many potential activities.
	In some homes variety of activities may be limited.	Children learn obedience and gain security from assigned tasks.
Activity/Rest	Can partially determine own schedule of activity versus rest.	Scheduled activities versus rest periods may not coincide with child's own rhythm.
	Some homes overstimulating, others offer insufficient activity.	

100

Table 17 (Concluded)

Observed Dimension	Home Environment	Child Care Environment
Flexible time schedule/Fixed time schedule	Usually flexible. If mother is working, it is constrained.	Time schedule usually fixed although relaxed schedule would provide more balanced experience.
Varied challenging environments/ Stable, safe environment	Offers broad range of stimuli and problem solving situations. Can observe adults handle unexpected, challenging situations.	Offers good physical care, stability of routine, and safe setting. Often children can't test limits of skills and are insulated from challenging situations.

Source: Adapted from textual information in "Feasibility Report and Design of an Impact Study of Day Care" based on unpublished work by Prescott and Jones, 1970, Center for the Study of Public Policy, Cambridge, Massachusetts, February 1971, pp. 141-145.

Segregation of Children and Parents

Bronfenbrenner (1972) reviewed research findings from infancy through later childhood ages and concluded that the ideal situation for children is an intact family, with both mother and father active in child rearing. He states:

> The fact that the structure most conducive to a child's development turns out to be the family is hardly surprising. The family is, after all, the product of a million years of evolution and should therefore have some survival value for the species (p. 13).

Bronfenbrenner indicates that progressively over the last 25 years, children have received less and less attention from their parents--and from other adults. He deplores the increasing segregation and isolation of children from their parents even in intact families. Stating that "children need people to be human," he observes that "we are experiencing a breakdown in the process of making human beings human" (p. 19). He feels that since "day care is coming to America," the programs should involve the child's family and the community, as well as the child, and should include people of both sexes and all ages, interacting and helping each other.

Group Care in Other Countries

Meers (1971) visited child care programs in France, East Germany, Czechoslovakia, Greece, Hungary, and Russia, spoke with administrators, reviewed the available research literature, and studied their approaches and philosophies. He found administrative and staffing problems were sufficiently formidable as to negate efforts to provide the children with optimizing care. Czechoslovakia was planning to cut back the program because of concern about the deleterious effects of group care on the children's development. Particularly for children under three years of age, he found that the effects of group care--e.g., problems of staffing--

were more deleterious than enhancing, particularly in terms of emotional development. The writer is reminded of Bronfenbrenner's observation at a meeting: "The Russians have found out that you cannot pay someone to do what a mother will do for free." Although Meers' article deserves to be read in full, these quotations are pertinent.

> In emphasizing the potential damage of early Day Care, there is a danger of implying that there is little risk for the three to five year olds. From the psychoanalytic viewpoint, the maturational vulnerabilities of that age span include (only) the risk of phobic, hysteric and obsessional neuroses and these risks certainly should be taken into account. Nevertheless, the child who is emotionally secure in his third year exudes intellectual curiosity and evidences a hunger for experience with his contemporaries and, in this instance, part-time Day Care offers delight and a momentous learning experience, i.e., so long as the option for daily attendance remains, more or less, with the child. (Emphasis added.)

> Child care by experts seems to have found a ready audience in both Congress and the general public. With Moynihan (1969) one may comfortably state that science is at its best as a critical tool, and that the scientist has lost his perspective when he commends modifications of such complex social-cultural-psycho-biological processes as child-rearing. Given the present state of our ignorance about psychiatric damage, massive Day Care programs appear all too much like Pandora's box. Those who would convey the idea that Day Care is unproblematic should review the programmatic, compensatory routines of Soviet texts (Tur, 1954; Schelovanova and Aksarina, 1960; Schelovanova, 1964) and the U.S. literature of child development research (e.g., Escalona and Leitch, 1952; Skeels, 1964; Mcv. Hunt, 1964; Bloom, Davis and Hess, 1965; A. Freud, 1965).

> In specifying the apparent dangers of early Day Care, one cannot ignore that some alternatives present even greater hazards. A range of studies of existing child care methods documents that disadvantaged children are too often left unattended for hours, or are cared for by older siblings of five and six years, or by ill and senile adults. The inadequacies of child care for some of our most disadvantaged mothers quite outweigh professional reservations and concerns about Day Care. Yet the danger in recommending Day Care, however conditionally, may be likened

to the medical use of morphine. The pain of the symptom may be relieved without cure, and addiction may follow.

Some clinicians and child development researchers, such as this author, are presently in an anomalous position. They have long and fervently recommended and supported the establishment of Day Care centers for special cases for the very young; yet, it now appears that a conditional recommendation may be misunderstood as a general endorsement. Professionals have previously carried partial responsibility for the oversale of institutional care, for foster care, and more recently for Head Start. Group Day Care entails far greater risks and these should be taken only where the alternatives are patently worse. (pp. 20-21).

Summary

We have been able to present only a few selected samples of the large volume of relevant research. The brevity of these presentations do not do justice to the researchers' efforts and rationale. However, they indicate that many factors are involved in child care issues. They also reveal the dynamic nature of the research effort, its ferment, and that it is too early to achieve conclusive results as to the content of early childhood programs.

Grotberg's (1969) discussion of the issues and problems involved in reaching definitive answers based on Head Start research is applicable to the early childhood field as a whole:

In any experiment, the first observations of experimental consequences do not afford an over-simplified choice between abandoning the experiment as a failure or perpetuating it rigidly as a success. Instead, discoveries serve to redirect efforts along alternative routes, to focus attention in new directions, to generate new ideas for further experimentation. Further, it would be unreasonable to expect immediate definitive answers about program alternatives and their success, since these answers must necessarily be preceded by investigations which establish the major dimensions of variation in people, programs,

> and consequences which need to be evaluated. Since more than forty years of research related to these basic questions have still not produced definitive answers (Hunt, 1961; Fuller, 1960; Sears and Dowley, 1963; Swift, 1964; and others), Head Start's research program cannot be expected to provide answers in just a few years. (pp 2-3)

There are ongoing programs (e.g., Head Start Planned Variation and the Follow Through evaluations) that may provide better information on which to base program components.

VIII RECOMMENDATIONS AND CONCLUSIONS

It has been slow in coming, but the opponents of early schooling are now gathering. To buttress their position, they are using research findings that range from the neurophysiological (brain development, visual maturity, intersensory development), through psychological, to educational studies. Within the early childhood research community, there is deep concern that the nation not establish massive and universal child care programs without first obtaining far better understanding of developmental processes in all domains and of the effects of group care or early schooling at various ages.

Research findings from animal and human studies suggest that:

- Experiences from birth (and even from conception) through the early years--the period of tremendously rapid growth and development--significantly affect the developing child's physical structure and functioning capacity. (They continue to affect him throughout life, but typically not as critically.)
- The family, which is the first and most pervasive environment, has inestimable effect on the attitudes, values, learning modes, life-style, and other attributes of the child.

Certain conditions obtain for large numbers of young children that affect their development:

- Some parents are absent or wish to be absent from the home for a variety of reasons, especially to work.
- An unknown number of parents are unable to provide those elements necessary for the child's optimal physical, social, emotional, and cognitive development.
- Some children have physical, mental, and emotional handicaps.

It is felt that there is a societal responsibility to provide for these lacks that affect the development of children. To this end, there are governmental programs in health, child care, education, and welfare, but they are deemed inadequate in scope, methods, and approaches. The next page summarizes the kinds of services that children and families require. The ideal situation for most children is a "good" home, typically supplemented by nursery school at four or three years of age and kindergarten at five, and supported minimally or as needed by community-society services. For children of working mothers, economically or educationally disadvantaged, and handicapped children, more out-of-home care and services are required.

The President has designated the Office of Child Development, Department of Health, Education and Welfare (yet to obtain legislated authority by the Congress) as the appropriate agency to coordinate the early childhood programs of Federal agencies and to plan and promote additional programs within budgetary limits.

There are those who claim that preschool programs are essentially educational in focus, part of the educational continuum. Therefore, this reasoning goes, they belong under the aegis of the educational establishment--OE. Thus, the basic issue facing OE relates to the nature of early education: Is it the lower end of the formal educational continuum or is it of sufficient qualitative difference to require separate and unique treatment(s)? Learning--in the adaptive sense at least--begins at conception and continues in all its forms throughout life. In essence, learning is crucial for sheer survival. Formal education, however, seeks to impart a structured set of skills and knowledge that society considers essential for its children to attain, with the expectation that they will then become useful citizens.

Hypothesized Child Care Needs

Ideal for most children:

"Good" home supplemented at 4 years (and perhaps 3 years) by a few hours of "nursery" school per week; at 5 by kindergarten

Effort required:

Ameliorative:

Supportive services to families needing them: nutritional, health, educational, temporary child care, informational, occupational

Preventive:

Educational:

Training of potential parents: junior and senior high school students

Societal:

Guaranteed income → more viable families

Children of working mothers, of grossly inadequate homes, or handicapped:

Developmental group or family day care specifically suited to individual child's needs for optimal growth; this implies a variety of approaches and programs keyed to diverse backgrounds

Effort required:

Ameliorative:

Supportive services (as above) are critical for many families

Preventive:

Educational:

Developmental early childhood programs
Training of potential parents: junior and senior high school students

Societal:

Guaranteed income → more viable families

Vulnerable children:

These abandoned, abused, battered, or neglected children require almost total societal care: foster home care or removal from the home at least during crisis family periods during which time attention can be paid to the needs of the family as well to make it more viable and less destructive to its members

To the extent that early childhood education is viewed as a way to impart a structured set of specific skills and knowledge, it can be said to be part of the educational continuum. But to the extent that it is seen as providing a relatively unstructured and enhancing environment for the child's total development, it can be viewed as unique and separate from the formal educational system. In the past, when early childhood education was considered at all, the latter view prevailed.

Now the question of differentiating OE's role from that of OCD is raised. For the present, it may be possible to differentiate the roles in terms of these early childhood education objectives:

- For OCD, programs that:
  - Enhance total child development
  - Involve child-rearing
  - Provide a variety of service programs for children under 5 years of age
  - Provide care for long hours of the day or night
- For OE, programs that:
  - Provide formal instruction to promote cognitive or intellectual development
  - Aid school-based programs initiated by states or cities for children 4 years old and older
  - Train parents or potential parents and preschool teaching staff
  - Provide before- and after- school care of school children.

Thus, OE may wish to delay asserting responsibility for additional early childhood education efforts until more is known about the consequences of preschool programs. For the present, OE might maintain its current low profile in the field and utilize this low pressure period to increase basic knowledge and operational program efficacy as preparation for the time ahead when it may be called upon either (1) to foster and support a lowered school entrance age, (2) to provide the rationale

for the undesirability of universal preschool programs or (3) to provide a variety of child care and education resources to meet the diverse needs of different child populations. The rationale for these suggestions follows:

(1) While it appears clear that there are a number of ways in which families "at risk" can be helped, we do not yet know enough about the probable long term effects of early group experience and early "educational" training with respect to the average young child in the normal range of homes, to justify mounting a universal program of early education. Even for the so-called disadvantaged child, results of experimental educational programs so far are sufficiently equivocal that they should continue to be treated as small-scale experimental efforts, with careful long term evaluation.

(2) Since the above research issues remain unanswered, to advance the concept of earlier schooling as a universal "good" that should be available to all preschool children appears to be premature. This is especially true at this time when OE is faced with unresolved issues in ongoing programs and when the costs of the educational endeavor are mounting.

(3) Since the needs of various groups for early childhood programs are so diverse--in program content, hours of operation, extent of parent involvement, comprehensiveness of services, and other factors--a variety of programs should be developed, validated, and evaluated. The Office of Child Development has been designated as the agency to coordinate such activities, with efforts from OE and other relevant agencies.

(4) There is an increasing realization of the importance of parents as the child's first and most significant teachers. As a result, there is a growing trend in the early childhood field to provide ways to support and help parents assume a more active, more aware role in their children's developmental progress. A variety of parent training programs, toy libraries, and other arrangements are needed, and in some cases being developed, by early childhood professionals. OE has a legitimate role in this effort.

(5) At present, OCD--with mission and programmatic responsibilities that span the birth-to-school age period--and with programs that address the physical, cognitive, social, and emotional development of children appears better suited to

administer the needed programs for children of working parents, and disadvantaged and handicapped children. This is especially true where programs must run long hours of the day or night.

However, there are critically important thrusts for OE to continue and expand. The primary one is to pursue basic knowledge of developmental processes, especially the learning process, as these undergird all educating efforts. Further, programmatic research on model or pilot early childhood efforts. Training of personnel is a legitimate function as is curriculum development for a variety of programs. The next pages outline various thrusts, any of which OE might expand, contract, or maintain at present levels. Included is a suggestion for parent-training or parent-aid programs. Parents, especially new parents, are anxious for ideas and suggestions that will help them understand their children's needs and behavior.

Plausible Alternative OE Approaches

(1) Training Focus: programs targeted toward parents and future parents and professional staff:

(a) Adult training programs for both parents of young children either in their homes or in groups. For expectant and new parents, programs could be conducted--or information relayed--through clinics, hospitals, or pediatric services.

(b) School programs for adolescents in family life education, child development, etc., including laboratory and work-study experiences.

(c) Training of early childhood personnel including professionals, and paraprofessionals, and elementary training of all auxiliary child program personnel (including janitors, cooks, etc.) in child development processes and practices.

(2) Knowledge and Information Focus: research and development, consisting of:

(a) Basic research on child developmental processes, including longitudinal, cross-sectional, and retrospective studies.

(b) Programmatic research, especially pilot programs; to determine effects of program elements on child behavior and function.

(c) Alternative program curricula development for:

(i) early childhood programs specifically, and for

(ii) teacher training programs of early childhood professionals and auxiliary personnel.

that include appropriate training and programs content for small family child-care units as well as larger units and child care centers.

(d) Instructional materials, including toys and appropriate technology.

(e) Development of a variety of models of facilities to house early childhood programs of various sizes and kinds.

(3) Dissemination Focus:

(a) Translation of various developed program models and materials to the field. The emphasis here would be on adapting these to the unique circumstances of the specific locale.

(b) Cadres of trained specialists to facilitate planning and implementation of programs upon request of local community. (This could be done in the spirit of the Atlanta-based Communicable Disease Center--now operating under a different name.)

(c) Organization of early childhood training conferences and publication of papers, through journals and ERIC.

(4) "Follow-Through" Focus: harmonization of early childhood programs with elementary school programs. Development of socialization-to-school and intellectual readiness (formerly the tasks of kindergarten and first grade) may have been largely preempted by earlier experience. Thus, upgrading of kindergarten and elementary grade curricula may be necessary.

(a) Before-school care for school-age children needing it, including serving of hot breakfast.

(b) After-school care of school-age children, including recreational and craft experience (some of these may either replace or reinforce school-day activities). In addition, both tutoring resources and quiet study areas should be made available.

(5) Focus on school-based early childhood development: beginning in FY 1975, the school-entrance age could be lowered to 4 in selected areas, with a view toward establishing that age over the next 20-25 years. By 1980, a similarly phased program of half-day sessions for 3 year olds could begin, to become universal by year 2000 or 2007.

Proposed Additional Federal Program

Evidence from such studies as the Coleman Report and from the apparent ineffectiveness of many educational programs in the central cities, as well as from testimony of professionals in early childhood development indicates that the impact of the home on the child's learning and life styles is far more significant than the impact of the school. Thus programs that would strengthen the family would appear to have positive affects on the school effort. Comprehensive supportive services for families should be available to all needing them. Important programs for amelioration of social conditions affecting the family would include:

(1) Income maintenance to allow the mother to choose whether she will stay home and care for children or work; income maintenance provides basic security and stability by allowing the planning of purchases, activities and many other aspects of family life.

(2) Availability of jobs for all persons willing to work

(3) Health care delivery systems that reach the economically less advantaged, including birth control information, prenatal care, genetic counseling, and general health care

(4) Improved programs in preventive and supportive health, welfare, and training services to families that will make them more viable and able to fulfill their members' basic needs.

Long-Term Future Trends

Assuming the continuation of such present trends, conditions, and circumstances as are presented below, it is most likely that there will be fewer children and that as a consequence they will be wanted (see Table 18).

Table 18

ANNUAL U.S. BIRTH RATE
1960-1971

Date	Number of Births	Rate
1960	4,307,000	23.8
1961	4,317,000	23.5
1962	4,213,000	22.6
1963	4,142,000	21.9
1964	4,070,000	21.2
1965	3,801,000	19.6
1966	3,642,000	18.5
1967	3,555,000	17.9
1968	3,535,000	17.6
1969	3,605,000	17.8
1970	3,725,000	18.2
1971	3,562,000	17.2

Source: U.S. Bureau of the Census, Population Estimates and Projections, Series P-25, No. 481, April 1972.

(1) Improved contraceptive technology and legalized abortion will allow for parental choice so that most children will be planned for and wanted.

(2) At present it is estimated that 40% of births are unwanted. Also 75% of families with 4 or more children live in poverty. Birth control methods can contribute here. According to Donald Bogue (as reported in the New York Times for October 3, 1971) the U.S. population with high fertility rates--blacks, Spanish-speaking people and rural residents--are experiencing rapid declines in fertility, while others, especially Protestants and Jews, have dropped fertility rates to replacement level. Bogue expects the downward trend to continue at least to 1990 and possibly to 2001.*

(3) Genetic counseling and pre-birth examinations can eliminate damaged fetuses, reducing numbers of physically and mentally handicapped children who inevitably cause extra strain on parents (and perhaps rejection of the child).

(4) Societal sanction of individual choice on whether to have children will leave women free to choose some other activity.

(5) Societal disapproval of large families and children born under adverse circumstances may be expressed through tax incentives for small families, tax disincentives for large families, and discontinuance of reduced payments for goods and services to large families.

(6) Motherhood by choice will be honored and respected as contributing to the national well-being.

(7) Knowledge of the needs of children for optimal development will grow throughout society.

(8) Many more supportive structures and services will be available to parents as they need and request them. These include accessible prenatal care, medical care, nutritional resources, social and educational services, and access to adequate housing.

---

* Birth rates are falling in most European countries as well. Seven countries (West Germany, Sweden, Denmark, Finland, Portugal, Czechoslovakia, and Hungary) are below replacement levels. Approaching zero growth rate are Switzerland, Austria, and East Germany, while the birth rates in Italy, Holland and Britain are drifting slowly downward.

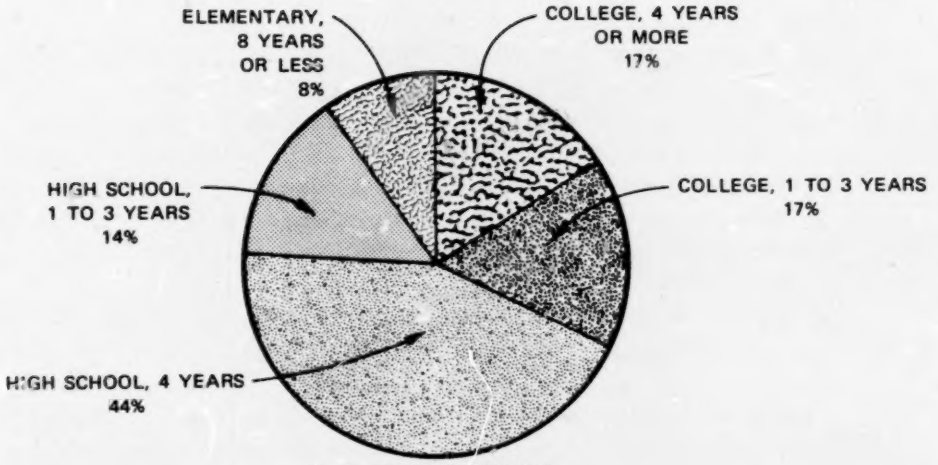
(9) The dramatic increase in the population's educational levels that has occurred in one generation points strongly to the fact that the increasingly more sophisticated generations of parents will insist on appropriate developmental resources for their offspring, including whatever educational resources are deemed beneficial. Figure 7 reveals that 78 percent of the 25 to 29 year old population are at least high school graduates--and many (34 percent) with college training or graduation--whereas only 59 percent of the 45 to 54 year olds had attained these educational levels. Also only 8 percent of the younger generation had less than 8 years of elementary education as contrasted with 23 percent of the older generation. Clearly, the younger generation--and succeeding generations--will tend to insist that their offspring receive what they view as their due.

(10) It is possible that at some future date OCD and OE will merge their functions. Although the demands for early childhood programs may diminish, there may still be a demand for OE to provide nursery school experience for 4- and possibly 3-year-olds, as well as before- and after-school care for children of working mothers.

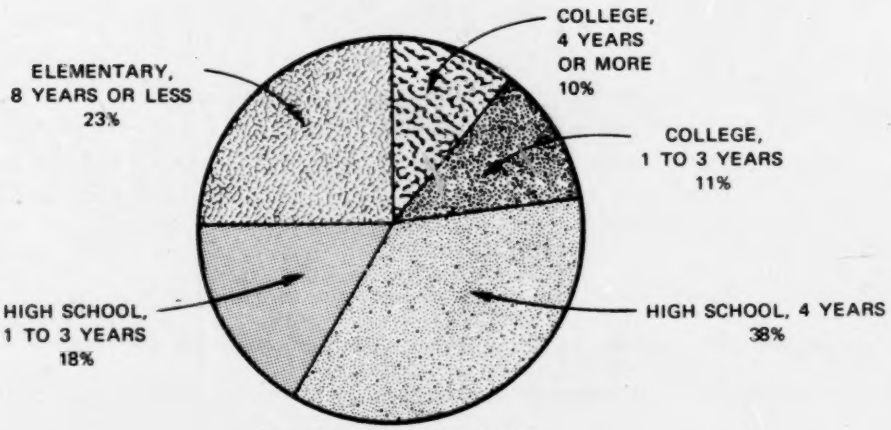
It would appear from the above that many more children will have their basic developmental needs met. However, it is also likely that, owing to the many societal conditions and emergent circumstances we have noted, many children will require federally funded programs for their optimal development.

Conclusion

There are serious policy issues involved in early childhood education. They range from basic general issues regarding the extent of societal responsibility for child care and rearing, through moral and scientific issues (including the long-range effects of group care on young children), to more specific issues of programmatic concern. The viability of the family as the primary child-rearing agent is at issue. Involved are basic and deepening societal problems that require concerted efforts toward their resolution.


ELEMENTARY, 8 YEARS OR LESS 8%
COLLEGE, 4 YEARS OR MORE 17%
HIGH SCHOOL, 1 TO 3 YEARS 14%
COLLEGE, 1 TO 3 YEARS 17%
HIGH SCHOOL, 4 YEARS 44%

(a) 25 TO 29 YEARS OLD


COLLEGE, 4 YEARS OR MORE 10%
ELEMENTARY, 8 YEARS OR LESS 23%
COLLEGE, 1 TO 3 YEARS 11%
HIGH SCHOOL, 1 TO 3 YEARS 18%
HIGH SCHOOL, 4 YEARS 38%

(b) 45 TO 54 YEARS OLD

SOURCE: "Statistic of the Month," American Education, March 1972, p. 41.

FIGURE 7 YEARS OF SCHOOL COMPLETED BY TWO AGE GROUPS: UNITED STATES, MARCH 1971

At present, it is clear that the case for societal assumption of universal child care and rearing has not been established. Clearly established, however, is the urgent need for expanded federally funded resources for the care and development of children "at risk" and for strengthening the nation's families. What remains unknown as yet, is what the "educational" component of early childhood programs should be and what kinds of settings and programs are appropriate for our children. Both our on-going program experiences and our research efforts will aid us in improving our decisions and programs over time.

There is a danger--and it is larger than it now seems. We have acknowledged that decisions of public policy are political; that is, they reflect the relative power of both positive and negative proponents. The danger arises from the institutional imperative of the formal educational system to at least maintain itself, and preferably to grow. The schools today have empty classrooms, owing to the falling birth rate, and teachers are unemployed. These two circumstances by themselves can power the drive to reduce the school entrance age without regard to the effects on children. On the other hand, the same situation provides an excellent opportunity: the existence of available facilities and teachers (who may be retrained) for the urgently needed early childhood programs.

Depending upon one's perspective, one may view the current increasing clamor for publicly funded extra-familial child care resources with renewed hope or with alarm: renewed hope because of the envisioned opportunity to provide children with those resources necessary to their optimal development in the spectrum of relevant domains: alarm because of the fear that, in the hope of achieving admirable ends, we may move massively and in haste with poorly tested means that may have deleterious results for children. It is critical that in choosing, we not only heed the physician's dictum to "take care that the remedy is no worse than the disease," but that we do far better. Our primary concern must be to ensure the provision of resources and environments that will allow the nation's children to develop in sound and healthy ways.

IX REFERENCES

M. Adams, "The Compassion Trip--Women Only," Psychology Today, Vol. 5, No. 6 (1971).

R. H. Anderson and H. G. Shane (eds.), As the Twig is Bent, (Houghton-Mifflin Co., Boston, 1971).

L. M. Andrews and M. Schlossberg, "Contemporary Communes, Con and Pro," Wall Street Journal (17 May 1971).

C. S. Bell, "Unemployed Women: Do They Matter?" Wall Street Journal, (15 March 1972).

C. Bereiter and S. Englemann, Teaching Disadvantaged Children in the Preschool, (Prentice-Hall, Englewood Cliffs, N.J., 1966).

B. Bernstein, "Language and Social Class," British Journal of Sociology, Vol. 11, pp. 271-276 (1960).

B. Bettleheim, The Children of the Dream (Macmillan Co., London, 1969).

B. Biber, "Goals and Methods in a Preschool Program for Disadvantaged Children," Children, pp. 15-20, (January-February 1970).

J. S. Bissell, "The Cognitive Effects of Preschool Programs for Disadvantaged Children," unpublished Ph.D. thesis, Harvard University (1970).

J. H. Black (ed.), Mastery Learning: Theory and Practice (Holt, Rinehart, Winston, Inc., New York, 1971).

B. Bloom, Stability and Change in Human Characteristic, (John Wiley and Sons, New York, 1964).

P. G. Bourne et al., "Day Care Nightmare--A Child Centered View of Child Care," prepared for the Field Foundation "Children's Advocacy Project," Institute of Urban and Regional Development, University of California, Berkeley (July 1970).

_____, "What Day Care Ought To Be," L. K. Howe, ed., Family Matters, (to be published in Fall 1972 by Simon & Schuster).

U. [illegible]nfenbrenner, "Developmental Research & Public Policy," Cornell University Manuscript (1972).

_____, "The Split-Level American Family," Saturday Review (7 October 1967).

_____, "A Theoretical Perspective for Research on Human Development," Cornell University Manuscript (1972).

_____, Two Worlds of Childhood: U.S. and USSR, (Russell Sage Foundation, New York, 1972).

A. L. Butler, "Areas of Recent Research in Early Childhood Education," Childhood Education, Vol. 48, p. 30 (Decembe~ 1971).

D. T. Campbell and A. Erlebacher, "How Regression Artifacts in Quasi-experimental Evaluations Can Mistakenly Make Compensatory Education Look Harmful," J. Hellmuth, ed., Compensatory Education: A National Debate, Vol. 3 of The Disadvantaged Child, (Brunner/Mazel, New York, 1970).

B. M. Caldwell, "Day Care: Instrument of Bold Social Policy," Saturday Review (20 February 1971).

_____, "The Rationale for Early Intervention," Exceptional Children, pp. 717-726 (Summer 1970).

_____, "Day Care--A Timid Giant Grows Bolder," Saturday Review, pp. 47-51 (20 February 1971).

"Child Care--Data and Materials," prepared by the staff for the Use of the Committee on Finance, U.S. Senate, 92nd Congress, 1st Session (16 June 1971).

C. S. Chilman, "Programs for Disadvantaged Parents: Some Major Trends and Related Research," manuscript (1969).

_____, "Some Angles on Parent-Teacher Learning," Childhood Education, Vol. 48:3, pp. 119-125 (December 1971).

D. K. Cohen, "Politics and Research Evaluation of Social Action Programs in Education," Review of Educational Research, Vol. 40:2 (April 1970).

R. I. Cohen, "Grouping for Instruction: Research Study Series 1966-67," Report RR-1, ERIC Document 036 829, Los Angeles County Superintendent of Schools, (June 1967).

J. S. Coleman, "The Children Have Outgrown the Schools," Psychology Today (1972).

L. J. Cronbach and P. Suppes, eds., Research for Tomorrow's Schools, (MacMillan Co., New York, 1969).

L. Datta, "A Report on Evaluation Studies of Project Head Start," paper presented at the 1969 American Psychological Association Convention (Washington, D.C., 1969).

W. A. Davis, Social-Class Influences Upon Learning, Harvard University Press (Cambridge, Mass., 1948).

H. C. Dawe, "A Study of the Effect of an Educational Program Upon Language Development and Related Mental Functions in Young Children," Journal of Experimental Education, Vol. 11, pp. 200-209 (1942).

"The Day-Care Jungle," Saturday Review (20 February 1971).

M. Deutsch, "Annual Report and Descriptive Statement," The Institute for Developmental Studies, New York Medical College (1962).

L. T. DiLorenzo, R. Salter, and J. Brady, "Prekindergarten Programs for Educationally Disadvantaged Children," Final Report, Project No. 3040, Contract No. OE 6-10-040, New York State Education Department (1969).

J. W. Evans, "Evaluating Social Action Programs," Social Science Quarterly, Vol. 50 #3, pp. 568-588 (December 1969).

"Family Assistance Plan Planning Papers, Vol. VI--Evaluation and Experimentation in Child Care," State of Vermont and Mathematica, Inc. (March 1971).

"Feasibility Report and Design of an Impact Study of Day Care," Harvard University, Center for the Study of Public Policy, prepared for U.S. Office of Economic Opportunity, Office of Program Development, Washington, D.C. (February 1971).

W. Fowler, "Cognitive Learning in Infancy and Early Childhood," Psychological Bulletin, Vol. 59, pp. 116-152 (1962).

R. M. Gagne, "Contributions of Learning to Human Development." Presidential address of Section I, American Association for the Advancement of Science Meeting, Washington, D.C. (1966).

"Gallup Opinion Index, Report No. 50" (August 1969).

G. F. Gilder, "The Case Against Universal Day Care," The New Leader, pp. 9-13 (3 April 1972).

J. I. Goodlad and H. Rowan, "Report of Forum No. 5," White House Conference on Children. (1970).

I. J. Gordon, et al., "An interdisciplinary Approach to Improving the Development of Culturally Disadvantaged Children," University of Florida, Gainesville (1966).

_____, "Success and Accountability," Childhood Education, Vol. 48:7, pp. 338-347 (April 1972).

S. W. Gray, "The Child's First Teacher," Childhood Education, Vol. 48:30, pp. 127-129 (December 1971).

E. H. Grotberg, ed., Day Care: Resources for Decisions, Office of Economic Opportunity (1971).

E. H. Grotberg, "Review of Research: 1965 to 1969," OEO Pamphlet 1608-13 (1969).

Louis Harris & Associates, Inc., "The 1970 Virginia Slims American Women's Opinion Poll," (Ruder & Finn, New York, 1970).

"The 1972 Virginia Slims American Women's Opinion Poll," (Ruder & Finn, New York, 1972

D. O. Hebb, The Organization of Behavior (Wiley, New York, 1948).

R. Heber and H. Garber, "An Experiment in the Prevention of Cultural Familial Mental Retardation," processings of the Second Congress of the National Association for the Scientific Study of Mental Deficiency (August-September 1970).

J. Hellmuth, ed., Disadvantaged Child: Compensatory Education: A National Debate, Vol. 3, (Brunner/Mazel, New York, 1970).

"Help for Millions of Working Mothers," U.S. News and World Report (27 September 1971).

R. D. Hess and V. Shipman, "Early Experience and the Socialization of Cognitive Modes in Children," Child Development, Vol. 36, pp. 869-886 (1965).

R. D. Hess et al., "The Cognitive Environments of Urban Preschool Children: Follow-up Phase," Graduate School of Education, University of Chicago (1968 and 1969).

R. D. Hess et al., "Parent Involvement in Early Education," and "Parent Training Programs and Community Involvement in Day Care," E. H. Grotberg, ed., Day Care: Resources for Decision, Office of Economic Opportunity (1971).

F. D. Horowitz and L. Y. Peden, "The Effectiveness of Environmental Intervention Programs," B. M. Caldwell and H. Ricciuti, eds., Review of Child Development Research (Russell Sage Foundation, New York, 1970).

J. McV. Hunt, "Toward the Prevention of Incompetence," Urbana National Laboratory on Early Childhood Education, University of Illinois (1967).

_____, Intelligence and Experience, (The Ronald Press Company, New York, 1961).

S. Jacoby, "Who Raises Russia's Children?" Saturday Review (21 August 1971).

J. Kagan "Statement on Day Care," Harvard University, Social Relations Department, (June 1971).

M. B. Karnes, "Research and Development Program on Preschool Disadvantaged Children," Final Report, Vol. I, Project No. 5-1181 Contract OE-6-10-235 (1969).

L. G. Katz, "Condition with Caution: Think Twice Before Conditioning," University of Illinois, Champaign, Ill. (February 1971).

_____, "Four Questions on Early Childhood Education," Child Study Journal, Vol. I, No. 2, p. 43 (Winter 1970/71).

_____, "Teaching in Preschools: Roles and Goals," Children, Vol. 17, No. 2, pp. 43-48 (March-April 1970).

M. D. Keyserling, "Day Care: Crisis and Challenge," Childhood Education, pp. 59-67 (November 1971).

_____, "Windows on Day Care," National Council of Jewish Women, New York (1972).

S. A. Kirk, Early Education of the Mentally Retarded, (Illinois University Press, Urbana, 1958).

L. Kohlberg, "Early Education: A Cognitive Developmental View," Child Development, Vol. 39, pp. 1013-1062 (1968).

L. Kohlberg and R. S. Mayer, "Preschool Research and Preschool Educational Objectives: A Critique and a Proposal," manuscript (1971).

E. R. La Crosse, Jr., et al., The First Six Years of Life: A Report on Current Research and Educational Practice, mimeo (1968).

I. Lazar and M. E. Rosenberg, "Day Care in America," in E. G. Grotberg, ed., Day Care: Resources for Devisions, Office of Economic Opportunity (1971).

J. Lazar and J. Chapman, "A Review of the Present Status and Future Research Needs of Programs to Develop Parentive Skills," prepared for the Interagency Panel on Early Childhood Research and Development, U.S. Department of Health, Education, and Welfare (April 1972).

P. Levenstein, "Learning Through and From Mothers," Childhood Education, Vol. 48:3, pp. 130-134 (December 1971).

O. Lewis, "The Culture of Poverty," Scientific America, Vol. 215:4, pp. 19-25 (1966).

S. Low and P. G. Spindler, "Child Care Arrangements of Working Mothers," DHEW Children's Bureau, Publication #461 (1968).

M. McLuhan, "Education in the Electronic Age," Interchange, Vol. 1:4, pp. 1-12 (1970).

W. P. McLure and A. M. Pence, "Early Childhood and Basic Elementary and Secondary Education: Needs, Programs, Demands, Costs," National Educational Finance Project, Special Study No. 1, University of Illinois, Urbana (1970).

E. Maccoby et al., "Activity Level and Intellectual Functioning in Normal Preschool Children," Child Development, Vol. 36, pp. 761-770 (1965).

M. Mead, "Future Family," Transaction, Vol. 8:11 (September 1971).

D. R. Meers, "International Day Care: A Selective Review and Psychoanalytic Critique," in E. H. Grotberg, ed., Day Care: Resources for Decisions, Office of Economic Opportunity (1971).

_____, "Head Start, Child Development Legislation, 1972" statement before the Joint Hearing before the Subcommittee on Children and Youth, 92nd Congress, 2nd Session (27 March 1972).

J. O. Miller, "An Educational Imperative and Its Fallout," paper presented to President's Committee on Mental Retardation Conference, (August 1969).

L. B. Miller and J. L. Dyer, "Experimental Variation of Head Start Curricula: A Comparison of Current Approaches," Annual Progress Report, June 1, 1969-May 31, 1970, Grant CG8199, OEO, Project Head Start, University of Louisville, Ky. (1970).

R. S. Moore, R. D. Moon, and D. R. Moore, "The California Report: Early Schooling for All," manuscript to be published in Teachers College Record, Columbia University (September 1972).

F. Mosteller and W. P. Moynihan, On Equality of Educational Opportunity, Vintage Books, New York, 1972).

R. K. Parker et al., "Overview of Cognitive and Language Programs for 3-, 4-, and 5-Year Old Children," The City University of New York (1970).

E. Pavenstedt, "Requirements of Children in the Second Year of Life in a Group Setting," unpublished paper (May 1965).

"Perspectives on Human Deprivation: Biological, Psychological and Sociological," U.S. Department of Health, Education and Welfare, Public Health Service (1968).

E. Prescott, "Group and Family Day Care: A Comparative Assessment," Pacific Oaks College, Pasadena, Calif., unpublished paper (1972).

_____, "The Large Day Care Center as a Child-Rearing Environment," Pacific Oaks College, Pasadena, Calif. (1967).

E. Prescott and E. Jones, "Day Care for Children: Assets and Liabilities," Children, Vol. 18:2 (March-April 1971).

E. Prescott, E. Jones, and S. Kritchevsky, "Group Day Care as a Child-Rearing Environment," report prepared for DHEW Childrens Bureau, Pacific Oaks College, Pasadena, Calif. (1967).

S. Provence, "Developmental Needs of Children and Their Relation to Group Care--First Year of Life," unpublished paper (1965).

J. Richmond and H. L. Weinberger, "Program Implications of New Knowledge Regarding the Physical, Intellectual, and Emotional Growth and Development and the Needs of Children and Youth," American Journal of Public Health, Vol. 60:4 (April 1970, supplement).

W. D. Rohwer, "Prime Time for Education: Early Childhood or Adolescence?" Harvard Educational Review, Vol. 41, No. 3, pp. 316-341 (August 1971).

E. S. Schaefer, editorial in Childhood Education, Vol. 48:1 (October 1971).

_____, "Intellectual Stimulation of Culturally Deprived Infants," unpublished paper (1969).

_____, "Toward a Revolution in Education: A Perspective from Child Development Research" The National Elementary Principal, pp. 18-25 (September 1971).

D. L. Schultze et al., Setting Natural Priorities for the 1973 Budget, (The Brookings Institution, Washington, D.C., 1972).

H. G. Shane, "A Curriculum Continuum: Possible Trends in the 70's," Phi Delta Kappan, pp. 389-392 (March 1970).

J. F. Short, Jr., "Action-Research Collaboration and Sociological Evaluation," Presidential address delivered at Annual Meeting of the Pacific Sociological Association, Long Beach, Calif. (March 1969).

H. M. Skeels, "Adult Status of Children with Contrasting Early Life Experiences; A Follow-up Study," Monographs of the Society for Research in Child Development, Vol. 31:3, (1966).

H. M. Skeels and H. B. Dye, "A Study of the Effects of Differential Stimulation on Mentally Retarded Children," Proceedings and Addresses of the American Association on Mental Deficiency, Vol. 44, pp. 114-136 (1939).

S. Smilanski, "Evaluation of Early Education," UNESCO Educational Studies and Documents, No. 42, pp. 3-17 (1961).

G. B. Sparks, "Problems and Alternatives Related to Provision of Family Day Care Services," Los Angeles County Department of Public Social Services (no date).

S. P. Strickland, "Can Slum Children Learn?" American Education, pp. 3-7 (July 1971).

H. A. Sprigle, V. Van De Riet, and H. Van De Reit, "Sequential Learning Program for Preschool Children nd an Evaluation of its Effectiveness with Culturally Disadvantaged Children," paper presented at American Education Research Association, New York (1967).

M. S. Stearns, "Report on Preschool Programs," Final Report, Contract HEW-OS-71-16, DHEW Office of Child Development (1971a).

M. S. Stearns et al., "Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood and Recommendations for the Future," sponsored by the Federal Interagency Panel on Early Childhood R&D (1971b).

F. L. Strodtbeck, "The Reading Readiness Nursery: Progress Report," unpublished paper (1963).

P. M. Timpane, "Educational Experimentation in National Social Policy," Harvard Educational Review, Vol. 40:4 (November 1970).

G. Vickers, "Changing Ethics of Distribution," Futures, Vol. 3:2, pp. 116-134, (June 1971).

E. Waldman, "Women at Work: Changes in the Labor Force Activity of Women," Monthly Labor Review (June 1970).

D. P. Weikert, "Early Childhood Special Education for Intellectually Subnormal and/or Culturally Different Children," paper prepared for the National Leadership Institute in Early Childhood Development, (Washington, D.C., October 1971).

_____, "Learning through Parents: Lessons for Teachers," Childhood Education, Vol. 48:3 (December 1971).

_____, "Preschool Programs: Preliminary Findings," Journal of Special Education, Vol. 1, pp. 163-181 (1967).

Westinghouse Learning Corporation and Westat Research, Inc., "Day Care Survey--1970: Summary Report and Basic Analysis," prepared for Office of Economic Opportunity (April 1971).

S. White, "Cognitive Development in the Preschool Years," in R. Hess and R. Bear, eds., Early Education: Current Theory, Research and Practice, (1968).

B. L. White et al., The Preschool Project: Experience and the Development of Competence in the First Six Years of Life, mimeo (1969).

"Women Workers Today," U.S. Department of Labor, Women's Bureau, (U.S. GPO, Washington, D.C. Revised 1971).

L. J. Yarrow, "Conceptual Perspectives on the Early Environment," reprint by DHEW Public Health Service.

L. J. Yarrow, J. L. Rubenstein, and F. A. Pedersen, "Dimensions of Early Stimulation: Differential Effects on Infant Development," papers presented at the Meeting of the Society for Research in Child Development, Minneapolis, Minn. (4 April 1971).

E. Zigler, "Learning from Children: The Role of OCD," Childhood Education, Vol. 48, No. 1 (October 1971).

_____, "The Environmental Mystique--Training the Intellect versus Development of the Child," Childhood Education, Vol. 46:8, pp. 402-412, (May 1970).

E. Zigler and E. C. Butterfield, "Motivational Aspects of Changes in IQ Test Performance of Culturally Deprived Nursery School Children," Child Development, Vol. 39, No. 1 (March 1968).

"Profiles of Children," White House Conference on Children (U.S., GPO, Washington, D.C., 1970).

APPENDIX

Table A-1

LICENSED OR APPROVED DAY CARE CENTERS, BY AUSPICES AND CAPACITY, BY STATE
March 1969--Provisional

State	Day Care Centers							
	Total		Public		Voluntary		Independent	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
United States estimated total	* 13,600	518,000	730	34,700	4,100	178,000	7,600	266,000
Alabama	237	9,721	71	3,200	50	2,172	116	1,421
Alaska	14	427	--	--	5	152	9	275
Arizona	342	15,600	--	--	136	6,200	206	9,400
Arkansas	98	3,642	51	1,808	27	1,158	20	676
California	2,220	97,050	336	19,200	918	37,730	966	40,120
Connecticut	366	9,683	8	280	192	5,427	166	3,976
Delaware	59	2,386	--	--	31	1,498	28	888
District of Columbia	154	5,628	--	--	22	812	132	5,216
Florida	365	21,313	--	--	102	7,058	263	14,255
Georgia	677	27,438	--	--	161	7,923	516	19,515
Hawaii	147	7,654	--	--	88	4,468	59	3,177
Idaho	18	563	--	--	--	--	18	563
Illinois	414	16,963	15	835	150	6,922	249	9,206
Indiana	59	2,445	1	75	37	1,701	21	669
Iowa	98	3,180	23	1,082	29	847	46	1,241
Kansas	128	2,784	6	160	37	1,197	85	1,427
Kentucky	305	7,466	--	--	100	876	--	--
Louisiana	220	6,717	6	194	54	2,484	160	4,039
Maine	21	990	--	--	10	611	11	379
Maryland	763	29,591	10	434	1	33	752	29,124
Massachusetts	123	3,920	--	--	44	1,759	79	2,161
Michigan	365	18,423	1	30	217	11,005	147	7,388
Minnesota	61	1,857	--	--	--	--	61	1,857
Mississippi	7	202	2	50	--	--	5	152
Missouri	270	10,371	2	90	97	3,783	171	6,498
Montana	24	787	--	--	--	--	24	787
Nebraska	36	987	6	150	8	230	22	607
Nevada	44	2,016	2	152	2	300	40	1,564
New Hampshire	134	3,917	--	105	132	3,812	--	--

Table A-1 (Concluded)

	Day Care Centers							
	Total		Public		Voluntary		Independent	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
New Jersey	488	15,326	4	4	4	4	4	4
New Mexico	† 26	† 667	1	20	† 8	304	† 17	† 343
New York	† 440	† 19,879	2	126	† 229	† 12,751	† 209	† 7,002
North Carolina	332	12,192	2	26	173	7,725	157	4,441
North Dakota	9	200	1	10	3	82	5	108
Ohio	95	3,517	2	50	87	3,455	6	12
Oaklahoma	399	9,344	--	--	56	3,028	343	6,316
Oregon	151	4,496	--	--	26	1,311	125	3,185
Pennsylvania	216	7,169	111	3,670	62	2,493	43	1,006
Puerto Rico	162	5,648	133	1,428	11	263	118	3,957
Rhode Island	22	1,126	-	--	18	851	4	275
South Carolina	188	7,566	14	528	6	875	168	6,163
South Dakota	2	65	-	--	1	45	1	20
Tennessee	684	24,969	‡	‡	‡	‡	‡	‡
Texas	1,553	56,690	-	--	396	20,311	1,157	36,379
Utah	65	2,569	-	--	--	--	65	2,569
Vermont	29	694	6	215	7	220	16	259
Virgin Islands	12	293	5	160	6	118	1	15
Virginia	238	11,335	2	85	118	5,626	118	5,624
Washington	133	5,398	-	--	68	2,823	65	2,575
West Virginia	33	957	-	--	14	502	19	455
Wisconsin	154	3,924	7	472	98	2,352	49	1,100
Wyoming	34	759	-	--	9	245	25	514

* Total includes 1,200 Centers with a capacity of 39,700 children which were not reported by auspices.

† Incomplete.

‡ Not reported.

Source: DHEW--OCD unpublished information.

Table A-2

LICENSED OR APPROVED FAMILY DAY CARE HOMES, BY AUSPICES AND CAPACITY, BY STATE
March 1969--Provisional

State	Family Day Care Homes							
	Total		Public		Voluntary		Independent	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
	* 32,700	120,000	2,500	8,000	550	2,100	27,700	102,000
Alabama	275	1,421	--	--	--	--	275	1,421
Alaska	60	158	--	--	--	--	60	158
Arizona	317	714	--	--	--	--	317	714
Arkansas	218	927	--	--	--	--	218	927
California	9,965	38,530	--	--	--	--	9,965	38,530
Connecticut	819	2,946	8	30	--	--	811	2,916
Delaware	607	1,696	--	--	29	84	578	1,612
District of Columbia	264	651	91	228	53	123	120	300
Florida	163	734	--	-	--	--	163	734
Georgia	108	648	50	300	--	--	58	348
Hawaii	121	526	--	--	--	--	121	526
Idaho	102	273	--	--	--	--	102	273
Illinois	1,946	6,096	262	535	20	43	1,664	5,491
Indiana	905	3,968	x	x	x	x	x	x
Iowa	619	2,334	73	214	3	11	543	2,109
Kansas	898	3,488	--	--	--	--	898	3,488
Kentucky	15	90	--	--	--	--	15	90
Louisiana	288	1,152	288	1,152	--	--	--	--
Maine	35	199	--	--	--	--	35	199
Maryland	813	2,945	173	618	--	--	640	2,327
Massachusetts	---	---	--	--	--	--	--	--
Michigan	1,857	5,709	1	1	8	18	1,848	5,690
Minnesota	1,865	5,717	--	--	--	--	1,865	5,717
Mississippi	4	17	4	17	--	--	--	--
Missouri	209	1,045	80	400	--	--	129	645
Montana	141	542	--	--	--	--	141	542
Nebraska	107	621	--	--	--	--	107	621
Nevada	215	879	--	--	--	--	215	870
New Hampshire	257	923	--	--	--	--	257	923

Table A-2 (Concluded)

Family Day Care Homes

State	Total		Public		Voluntary		Independent	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
New Jersey	131	295	131	295	--	--	--	--
New Mexico	(y) 37	(y) 92	37	92	--	--	x	x
New York	132	4,183	1,093	3,340	125	346	103	497
North Carolina	34	183	--	--	2	11	32	172
North Dakota	19	51	--	--	--	--	19	51
Ohio	63	197	63	197	--	--	--	--
Oklahoma	178	640	111	305	--	--	67	335
Oregon	6	31	--	--	1	5	5	26
Pennsylvania	917	3,387	--	--	x	x	x	x
Puerto Rico	110	601	--	--	--	--	110	601
Rhode Island	70	235	20	49	3	10	47	176
South Carolina	148	1,752	--	--	--	--	148	1,757
South Dakota	26	75	--	--	--	--	26	75
Tennessee	147	2,011	x	x	x	x	x	x
Texas	1,218	5,777	--	--	307	1,451	911	4,326
Utah	267	842	--	--	--	--	267	842
Vermont	29	246	--	--	--	--	29	246
Virgin Islands	1	6	--	--	1	6	--	--
Virginia	546	1,765	--	--	--	--	546	1,965
Washington	4,042	13,526	--	--	--	--	4,042	13,526
West Virginia	30	89	30	89	--	--	--	--
Wisconsin	--	--	--	--	--	--	--	--
Wyoming	71	104	--	--	--	--	71	104

* Total includes 2,000 homes with a capacity of 8,400 children which were not reported by auspices.

x Not reported.

(y) Incomplete.

Source: DHEW--OCD unpublished information.

Table A-3

FEDERAL PROGRAMS PROVIDING SUPPORT
FOR CHILD DAY CARE SERVICES

Agency and program	Program purpose	Program service	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DHEW Office of Child Development						
Headstart(title II Economic Opportunity Act).	A comprehensive early childhood development program for preschool children. Family involvement is included.	Health, nutrition, social services, education, parent participation as advisers and workers.	80 percent Federal, 20 percent local (cash or in-kind).	Public nonprofit agencies, CAA's religious groups, school systems, higher learning institutions.	Yes, 10 percent of participants may be nonpoor.	$338,000,000
Parent and child centers (title II, Economic Opportunity Act).	Center established to help families function effectively and for direct services to children.	Comprehensive child health care, children's social activities, parent activities (understanding child, attaining parental competence) general family social services.	80 percent Federal, 20 percent local (cash or in-kind).	(Same as Headstart).	No----------	$5,000,000 (1969)
DHEW Social and Rehabilitation Service						
Social services to families and children receiving AFDC (title IV, Social Security Act).	Social services to needy families with dependent children to help the family maintain and strengthen family life.	Child care services foster care, family planning, prevention or reduction of births out of wedlock, child protective legal, and health services.	Federal Government pays 75 percent of state costs.	State Welfare agencies.	No----------	

Table A-3 (Continued)

Agency and Program	Program purpose	Program service	Funding	Components eligible to operate	Services available to nonpoor	Program Budget
Child Welfare Services(title IV, SSA).	Grants-in-aid to State welfare agencies for (1) preventing or remedying neglect, abuse delinquency:(2) protection and care for homeless child; (3) protecting children of working mothers (4) providing for foster and day care.	Day care; foster care; protective services institutional care, homemaker services; adoption placements.	Federal Government pays variable matching formula 33 1/3-66 2/3 percent, $70,000 grant to each state.	State Welfare agencies.	----------	$7,276,000 (day care services).
Child care for the work incentive program (WIN)(title IV Social Security Act).	Grants to State welfare agencies to provide child care services for WIN enrollers.	Day care services.	85 percent Federal participation fiscal year 1969, 75 percent thereafter.	Any individual or agency that meets State child care standards.	No----------	$56,140,000 (preschool and school age).
OFFICE OF ECONOMIC OPPORTUNITY						
Migrants and seasonal farmworkers program (title III B, EOA).	Camp social services for farm labor families.	Basic education, job training, day care service.	100 percent Federal.	Public, private non-profit agencies, institutions of higher learning.	No-------	$1,400,000 (day care).
DEPARTMENT OF LABOR						
Work incentive Program(title IV, SSA).	Designed to increase employability of persons receiving AFDC by using various Governmental programs.	Job placement, training, special projects for those who cannot be employed.	80 percent Federal, 20 percent in cash or in-kind.	Public and private nonprofit agencies (organ for public purpose).	No----------	Preschool training not reported
Concentrated employment program title I, EOA, MDTA).	Brings together all available manpower programs under single sponsorship.	Provide multiple services to individuals--job placement, training, social services, medical and day care services.	100 percent Federal.	Public and private nonprofit agencies (usually CAA's).	No---------	$6,374,196 (not all projects responded).

Table A-3 (Concluded)

Agency and program	Program purpose	Program service	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT						
Model cities program (Demonstration Cities and Metropolitan Development Act of 1966).	To improve the physical, social, and economic conditions of a large blighted neighborhood. Planning and supplemental grants and urban renewal projects are included.	Funds are made available to State and local organizations to plan a comprehensive improvement system for the target neighborhood.	----------	Public and private nonprofit organizations.	No (blighted area involved).	$10,565,000 (day care).

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.

Table A-4

FEDERAL EDUCATION PROGRAMS FOR ECONOMICALLY
DISADVANTAGED CHILDREN, INCLUDING MIGRANT & INDIAN CHILDREN

Agency and program	Program purpose	Program service	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DHEW Office of Education						
Title I--ESEA	Federal aid to State for educational programs for deprived children. Program designed as comprehensive education program involving coordinated use of resources from other programs.	Special educational assistance to educationally deprived children.	100 percent Federal.	State and local education agencies.	Yes(most are economically as well as educationally deprived).	$58,017,000 (preschool and kindergarten)
Title I--ESEA Migrant Program	Grant awards to State education department to assist in education of migrant children.	General Instruction, especially teaching of English as second language. Health care, clothing, and food.	----------	State and local education agencies, private nonprofit agency, institution of higher learning.	----------	$2,723,684 (1969)
Follow Through (title II, EOA)	Designed to augment and build upon gains made by poor child in Headstart or similar programs in kindergarten through 3 years of schooling. Comprehensive program to meet child's instructional, physical, and social needs.	Instruction, nutrition, health, social and psychological services. Parent participation is included	80 percent Federal, 20 percent local (cash on in kind).	Local educational agencies community action agency, private nonprofit agencies.	No----------	$58,000,000

437

Table A-4 (Concluded)

Agency and program	Program purpose	Program service	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Handicapped Children's Early Education Assistance Act.	Demonstration program to establish education development centers for handicapped children.	Diagnostic and therapeutic services for handicapped children. Educational and guidance services for parents.	90 percent Federal.	Public and private nonprofit organizations, universities.	Yes----------	$1,000,000 (1969)
Aid to State School for the Handicapped (title I-ESEA).	Provides grants to state to assist in education of handicapped children in State operated or supported schools for the handicapped.	Various developmental programs for handicapped children.	100 percent Federal.	State operated or state supported school for handicapped.	Yes---------	$36,690,000 (preschool cannot be broken out)
Education for the handicapped (title VI A, ESEA)	Grants to States to assist in the initiation, expansion, and improvement of special education for handicapped children.	Special educational and related services for handicapped children at preschool elementary and secondary level.	Based on number of 3 - 21 year olds in State.	State and local educational agencies.	Yes---------	$4,000,000
DEPARTMENT OF INTERIOR						
Kindergarten program for Indian children in Federal schools (25 U.S. Code 13).	Kindergarten classes for Indian children operated in Federal facilities.	Kindergartens.	Direct Federal program.	Bureau of Indian Affairs.	Yes (Indian children).	$1,850,000 (kindergarten)
Johnson-O'Malley program of aid for public schools (25 U.S. Code 452).	Financial aid to public schools to provide kindergarten for reservation children.	Financial aid to schools.	60 percent Federal for 33 units, full financing for 74 units.	School districts	Yes--------	$2,300,000 (kindergarten)

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.

Table A-5

FEDERAL PROGRAMS PROVIDING HEALTH
AND FOOD SERVICES FOR CHILDREN AND FAMILIES

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
PHS--Health Services and Mental Health, Administration						
Maternal and child health grants (title V, SSA).	Grants to States to reduce infant mortality and promote the health of mothers and children, particularly in areas of economic distress.	Maternity, clinics family planning, visits by public health nurses, pediatric clinics, school health programs, immunizations, mental retardation clinics.	States must match 1/2 of Federal funds appropriated.	State health, and welfare agencies, public and private nonprofit organizations.	Yes------	Not specific for preschool
Maternity and infant Care (title V, SSA).	Projects to reduce infant and maternal mortality and to reduce incidence of retardation and other handicaps associate with childbearing.	Parental care, health care for infants with health problems, family planning services.	Federal pays 75 percent, 25 percent State and p local.	State and local health agencies, public and nonprofit private organizations.	No----------	$38,550,000 (total)
Crippled Children's Services (title V, SSA).	Grants to States for services to crippled children and for services for conditions leading to crippling.	Medical, surgical, corrective and diagnostic services. Hospitalization and aftercare is included. Grants made for special project to improve service. Training of personnel.	State must match 1/2 of Federal funds appropriated.	State and local health agencies public and private nonprofit organization.	Yes--------	$58,000,000 (total)

Table A-3 (Continued)

Agency and programs	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Comprehensive Health Care for Children and Youth (title V, SSA).	Comprehensive health care to children of low-income families who would not otherwise receive the services provided.	Diagnosis and preventive services, medical and dental treatment, correction of defects, aftercare.	75 percent Federal, 25 percent State and local.	State and local health agencies, medical schools teaching hospitals.	No----------	$40,905,000 (preschool and school age)
Migrant health program (Sec. 310, Public Health Service Act).	Grants to improve the health status of migratory farm workers and their dependents.	Medical, hospital clinics, public health nursing. and othe service.	No fixed matching about 60 percent Federal 40 percent State and local.	State and local health agencies, public and private nonprofit organizations.	No----------	$8,000,000 (1969 program total, 25 percent under 6)
Regional medical programs (title IX, Public Health Service Act).	Grants to assist in establishment of regional cooperative arrangements among medical schools, research institutions and hosptials in fields of heart disease, cancer, strokes and related diseases.	Education, research, training, and related demonstration in patient care. Cooperative arrangements to avail to patients the latest advances in the field.	----------	Medical schools, research institutions, hospitals.	Yes----------	$1,667,000
Chronic disease programs (Public Health Service Act).	----------	----------	----------	----------	----------	$326,000
Community Health Service (Public Health Service Act)	Stimulates, conducts supports programs designed to increase the efficiency of utilizing health resources for quality health services.	Promotes, develops and supports comprehensive health planning, standards and evaluation activities. Increase adequacy and scope of health services and programs of comprehensive health care.	----------	Community Health Service.	----------	No program specifically for children

Table A-5 (Continued)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DEPARTMENT OF AGRICULTURE						
School milk program (Child Nutrition Act).	Increase consumption of milk by children in nonprofit schools, institutions, camps, and day-care centers (confined with expanded food program in fiscal year 1970).	Cash payments to State including operating expenses.	---------	State agencies	Yes-------	$103,595,000 (all children, 1969)
School lunch program--Child nutri-programs (National School Lunch Act. Child Nutrition Act).	To provide best possible nutrition for every child regardless of family's economic condition.	Cash payments to States, special assistance to schools in poverty areas, school breakfast program, administrative expenses, non-food assistance (food service equipment).	---------	do----------	Yes ------	$367,466,000 (all children)
Food Stamp Program (Food Stamp Act).	Provide increased nutrition to households with limited resources.	Issurance of stamps to households to purchase food. Family pays for stamps accord to income.	---------	State welfare agencies.	No--------	$340,000,000 (total program)
Removal of surplus agricultural commodities (sec. 32, act of Aug. 24, 1935).	Commodity program payments for suplus food items.	Funds used to purchase certain surplus food items for needy children and low-income persons.	---------	State welfare agencies.	No----------	$386,214,000. (total program)

Table A-5 (Concluded)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Special Food Service program for children (sec 13, School Lunch Act).	Provide better nutrition for children in public and nonprofit private institutions for child in poor areas and areas with many working mothers.	Cash reimbursement for food, direct food donations from USDA, financial help to buy food equipment.	75 percent Federal.	Public and private nonprofit agencies.	Yes--------	$5,750,000 (all children 1969)

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.

Table A-6
FEDERAL BASIC AND APPLIED RESEARCH
AND DEMONSTRATION PROGRAMS IN CHILD CARE
AND CHILD DEVELOPMENT

Agency and program	Program purpose	Program service	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DHEW--Social Rehabilitation Service Admin.						
Child welfare research and demonstration grants program (title IV, Social Security Act).	Grants to institutions of higher learning and nonprofit agencies or organizations engaged in research and demonstration projects in the area of new methods or facilities relating to child welfare.	Demonstrations in day care. Research in adoption, foster care, protective services, and policy formulation.	Cost sharing usually not less than 5 percent by grantee.	Institutions of higher learning public or nonprofit agencies and organizations.	----------	$2,725,588 (day care demonstration and other pro(jects)
SRS-Office of Juvenile Delinquency						
Improved techniques and practices (title III, Juvenile Delinquency Prevention Act Public Law 90-445).	Grants for development of improved techniques and practices in field of juvenile delinquency. Also for the provision of technical assistance to agencies and organizations.	Development of improved techniques and practices.	----------	State agencies, public and nonprofit private organizations.	----------	----------
Office of Education						
Research and demonstration projects (title III, Mental Retardation and Facilities and Community Mental Health Centers Const. Act 1963).	Support for research and related activities for children of all ages.	Research activity for education of handicapped children.	----------	State and local education agencies, public and private nonprofit institutions of higher learning.	----------	$2,806,888 (preschool and school age)

Table A-6 (Continued)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Education research and related activities (Cooperative Research Act of 1954, as amended by ESEA).	Educational research and related activities for children of all ages.	Surveys, demonstrations, dissemination, and development of educational programs.	----------	Public and private nonprofit institutions of higher learning.	----------	$4,716,883 (all ages).
PHS—Health Services and Mental Health Administration						
Maternal and child health research (title V, SSA).	Grants to improve the operation, usefulness, and effectiveness of maternal and child health programs.	Research projects for health programs emphasis on feasibility cost and effectiveness of comprehensive health programs. May include training of health personnel.	10 percent of total appropriation for research grants	Institutions of higher learning, public and private organizations.	----------	----------
National Institute of Mental Health (title IV, Public Health Service Act).	Administer direct and support programs for mental health for regions. States, communities and the Nation	Research, training, technical and consultative services. Research, training and construction grants.	----------	NIMHI States, institutions of higher learning research agencies.	----------	$5,000,000
Maternal and child health program of the Indian Health Service (transfer Act of 1955).	Promote and upgrade general health of Indian population.	Comp health care for Indian children (as part of plan for all indians) includes preventive, curative and rehabilitative act. Research demon. training projects included.	100 percent Federal.	Indian Health Service.	Yes, (those who can are asked to pay).	Preschool amount cannot be broken out.

Table A-6 (Concluded)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Services available to nonpoor	Program Budget
National Institutes of Child Health and Human Development (Public Health Service Act 441).	To foster, conduct and support research and training in basic biological and behavioral sciences relating to child health and development.	Intramural and extramural child health research, extramural grants and contracts for research and training.	----------	NICHD, individual research, institutions of higher learning.	----------	$15,493,000 (estimated)
DEPARTMENT OF LABOR						
Experimental, Developmental, Demonstration and Pilot Projects(Title I, MDTA).	To improve techniques and demonstrate effectiveness of specialized methods in meeting manpower employment and training problems of workers.	Grants to provide special or experimental programs for disadvantaged workers.	90 percent Federal, 10 percent in-kind.	----------	No----------	No figures reported on preschool projects

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.

Table A-7

FEDERAL TRAINING AND EMPLOYMENT
PROGRAMS RELATED TO
CHILD DEVELOPMENT

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DHEW--Social Rehabilitation Service--Community Services Admin.						
Child welfare training grants (title IV, SSA)	Grants to institutions of higher learning to assist in training students in the field of child welfare. May also include training of volunteers to serve in child welfare programs.	Training personnel in the field of child welfare.	----------	Institutions of higher learning.	----------	---------
SRS--Office of Juvenile Delinquency						
Training (title II, Juvenile Delinquency Prevention Act Public Law 90-445).	Grants for training personnel in the field of juvenile delinquency.	Training personnel	----------	State agencies, public and nonprofit organizations.	----------	----------
SRS--Administration on Aging						
Foster grandparents program.	To employ low-income persons over 60 for purpose of establishing a continuing "grandparent" relationship with children under 17 (usually deprived in an institutional setting).	Training of participants and maintenance of program.	Up to 90 percent Federal, 10 percent local(cash or in-kind).	Any non-Federal public or private nonprofit agency,	Foster grandparent must be low income; children usually but not mandatory.	----------

Table A-7 (Continued)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Retired senior volunteer program.	When program is started will recruit and train persons over 60 for community volunteer work.	Volunteers will serve in public agencies and institutions including day care centers and schools.	Up to 100 percent Federa.	Any public or private nonprofit agency or institution of higher learning.	----------	---------
DHEW--Office of Education						
College work study program (title IV C, Higher Education Act).	Promote the part-time employment of students from low-income families to pursue higher education.	Part-time employment of students in public or private nonprofit institutions.	80 percent student earnings paid Federal. 20 percent paid educational institution or place of work.	Institutions of higher learning.	No----------	---------
Training program for early childhood educational personnel.	Awards to universities and State and local education agencies to conduct training programs to improve the qualifications of individuals serving in educational programs.	Training programs for people participating in elementary and secondary education.	Cost reimbursable basis.	States and local education agencies, institutions of higher learning.	----------	---------
PHS--Health Services and Mental Health Admin.						
Training of Professional Personnel(title V, SSA).	Grants for training of personnel for health care and related services for mothers and children.	Training in institutions of higher learning.	100 percent Federal.	Public and private nonprofit institutions of higher learning	----------	---------

Table A-7 (Continued)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available nonpoor	Program Budget
DEPARTMENT OF LABOR						
Manpower Development and Training Act (Public Law 90-835).	To provide job training skills for displaced workers, unemployed persons in skill shortage categories.	OJT and institutional training.	90 percent Federal.	Public or private employees labor organization, trade associations.	No----------	Preschool cannot be broken out
On-the-job training program (title II, MDTA)	To provide onsite job training for unemployed and underemployed	Job training, basic education counseling.	90 percent Federal, 10 percent in kind.	Public and private employees labor organization.	No----------	Do
Operation Mainstream(title II, EOA).	To provide training and jobs for poor people, in rural and small towns, who have history of chronic unemployment.	Projects which provide jobs and concentrate on improving physical environment and facilities in community.	----------do.	Public and private nonprofit organizations.	No----------	No training involved, preschool
Work incentive Program(title IV, SSA).	Designed to increase employability of persons receiving AFDC by using various Government programs.	Job placement, training, special projects for those who cannot be employed.	80 percent Federal, 20 percent in cash or in-kind.	Public and private nonprofit agencies (organ for public purpose)	No----------	Preschool training not reported
New careers (title II, EOA).	To provide training and jobs at professional level for low-income adults in area of community services.	Training, employment, related education, career development.	90 percent Federal, 10 percent in-kind.	State, public and private nonprofit organizations.	No----------	----------
Neighborhood Youth Corps(title I B, EOA).	Provides useful work experience for impoverished youth.	In-school, out-of-school for drop-outs, summer work experience, related training.	----------do	Public agencies	No----------	No records kept for training preschool act

Table A-7 (Concluded)

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
Special impact program(title I D, EOA).	Special projects to serve as catalysts in developing employment opportunities and rehabilitating environment.	Promoters economic business, and community development while generating and stimulating work experience and training projects.	90 percent Federal, 10 percent in-kind.	Public agencies	No---------	No training (to date) re preschool activity

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.

Table A-8
FEDERAL SUPPORT FOR DAY CARE FACILITY
RENOVATION OR CONSTRUCTION* OR SMALL BUSINESS LOANS

Agency and program	Program purpose	Program services	Funding	Components eligible to operate	Service available to nonpoor	Program Budget
DHEW--PHS--Health Services and Mental Health Administration						
National Institute of Mental Health (title III, Public Health Service Act).	Administer direct and support programs for mental health for regions, States, communities and the Nation.	Research, training, technical and consultative services. Research, training and construction grants.	--------	NIMHI States, institutions of higher learning research agencies.	----------	$5,000,000
DEPT. OF COMMERCE Small Business Admin.						
Business loans (Small Business Act).	Loans to small businesses to strengthen small business sector of economy.	Loan guarantees participation loans with banks and direct loans.	----------	Small Business Administration.	Yes--------	----------
Lease guarantee program (Small Business Investment Act).	To guarantee leases so that small bussisses can obtain space in desirable business areas.	Lease guarantee through private insurance companies or directly.	----------	Small Business Associations participating insurance companies.	Yes----------	----------
Economic opportunity loan program (title IV, EOA).	Provides assist to disadvantaged people who want to start a business	Guarantee of bank loans, direct loans, management counseling and assist.	----------	Small Business Administration	No----------	----------

* Limited funds available for minor repairs of renovation of facilities in following DHEW programs: Headstart; Parent and Child Centers; AFDC; Foster Grandparents Program; and Follow-through.

Table A-8 (Concluded)

Agency and programs	Program purpose	Program services	Funding	Components eligible to operate	Service availabl. to nonpoor	Program Budget
Neighborhood facilities program (HUD Act)	Grants to assist financing neighborhood centers for health, social, recreational, or similar community services.	Financial assistance to establish neighborhood centers.	Up to 66 2/3 percent Federal and 75 percent in certain underdeveloped areas.	Public agencies and private nonprofit organizations (through contract)	Yes----------	Amounts for preschool not available
Indoor community facilities for low-rent public housing projects (U.S. Housing Act, Sec.2).	Loans to local housing authorities to construct or acquire community facilities for low-rent housing.	Community facilities for health, social, educational purposes.	----------	Local housing authority.	No-------	Projects not for specific age groups

Source: Adapted from the Congressional Record, February 9, 1970, pp. H707-H711.